Lectures
ON
THE SURGICAL TREATMENT OF ANEURISM
IN ITS VARIOUS FORMS.

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LECTURE VI.

AXILLARY ANEURISM (CONTINUED).—ANEURISMS IN THE ARM, FOREARM, AND HAND.

MR. PRESIDENT AND GENTLEMEN,—In my last lecture I was occupied in showing *first*, from the preparations of cases of axillary aneurism, that these differ so much in their size and relations, and in the condition of the artery on which they are seated, that they are amenable to very different methods of treatment. I proceeded to show, both by published statistics and by recent experience, how manifold are the dangers attendant on ligature of the subclavian artery; and I then quoted five cases, all that I know at present, and which I believe to be authentic and reliable, of the success of pressure in the treatment of axillary aneurism. To these I think I ought to add a sixth—viz, the case under Mr. Gay's care of subclavio-axillary aneurism which I mentioned last year* as being then under treatment. The patient is now practically well, for though circulation continues through the sac the tumour shows no sign of increase, and it is hoped that it has reached that stage of what I called last year "practical cure," where the sac is lined with firm and permanent deposit, through some part of which the circulation is still carried on.

But though I have dwelt on the possibility of the cure of axillary aneurism by compression, and have urged its trial in the place of an operation so deadly as the ligature of the subclavian, I must have expressed my meaning very badly if I left the impression that the treatment is one to be lightly undertaken or easy to carry out. Even the slight sketch which my time enabled me to give of Dr. Peatson's case showed what difficulties sometimes surround it—difficulties which, before instances had been produced of the success of the treatment, have usually been too much for the resolution of the patient or the faith of the surgeon. Now that we know that success may be obtained, I have little doubt that the attempt will be more perseveringly insisted on. And in mentioning again Dr. Peatson's case, I am very happy to say that he has authorised me to present the most valuable and unique preparation illustrating it to the Hunterian Museum.

Experience, then, proves that there are cases in which intermitting or rapid pressure may be successfully employed. But can we distinguish such cases, or ought the surgeon always to commence the treatment by a trial of pressure? The latter would, I think, be an improvement on the indiscriminate resort to ligature; but I am not certain that indications may not be found for selecting those cases in which pressure gives most promise of success, or at least for rejecting those of an opposite character.

There are, in the first place, some cases usually classed as axillary aneurism, but which may be more accurately described as rupture of the axillary-artery, in which, as far as present experience goes, pressure has but little chance of succeeding. In these, the essential feature of aneurism—namely, a sac capable of contracting on the coagulating blood—is wanting, and without the assistance of this contraction (on which Professor Rizzoli lays such just stress) not even the ligature of the artery above can be trusted to succeed, still less the certainly feebler influence of indirect compression.

Such appears to have been undoubtedly the state of parts in Mr. Syme's first case.† Here, after some jerk or strain, the history of which was obscure, a large tumour appeared distending the skin of the axilla but not discolouring it, accompanied by distinct "aneurismal" bruit, but with no pulsation except at its upper part above the clavicle, and causing the entire loss of the pulse at the wrist. In this case Mr. Syme believed that it would have been impossible to tie the subclavian artery on account of the projection of the tumour upwards above the clavicle, and he therefore cut into the axilla, and tied both ends of the ruptured vessel, which were found lying separated from each other in a large cavity filled with blood and clots. This patient died, from aneurism of the aorta, some time after recovery from the operation, and his arterial system was found "in a state of general and extreme degeneration."

Although Mr. Syme reports this as a case of "aneurism," there can, I think, be little doubt that it was one of ruptured artery, in which in all probability no sac at all, or only a very imperfect one, had formed, otherwise we can hardly account for the absence of pulsation in all parts of the tumour except the immediate neighbourhood of the cardiac orifice of the ruptured vessel.

Without going so far as to assert that in such injuries the Hunterian ligature will never succeed, I think I may say that in cases where there is good reason to believe that an artery has been ruptured, and no complete sac has formed, the old operation, if practicable, should always be preferred.

Again, there are cases of axillary aneurism in which the tumour (or, as Professor Spence thinks, the action of the nerves irritated by the tumour) has raised the clavicle so much that compression of the subclavian is rendered doubly difficult. In such instances the ligature of that artery is also an operation of much difficulty and danger, and the surgeon before attempting it should maturely weigh the other plans which have been proposed for the treatment of such aneurisms—viz., electro-puncture, coagulating injection, manipulation, and the old operation as practised by Mr. Syme. They may be taken perhaps in that order. Electro-puncture is, I think, on the whole, the least dangerous. The injection of perchloride of iron will usually be prohibited by the impossibility, under these circumstances, of suspending the circulation; but if the elevation of the clavicle is not extreme, it may be found possible to compress the artery for the short length of time required, even though its prolonged compression is impracticable, and it then holds out more definite prospect of cure than galvano-puncture.

The use of electricity in the treatment of aneurism has up to the present time been reserved almost exclusively for the treatment of internal aneurisms, and very properly, since, whatever may be the future prospects of electrolysis, we do not as yet know enough of its effects on the blood of an aneurism to enable us to predict what will be its results in any given case with any approach to certainty; and for external aneurisms we possess means far more uniform in their action and far more successful.

That manipulation might be successfully practised in axillary aneurism I cannot doubt, though it seems to me that the effects of this method of treatment are too uncertain to render it likely ever to come much into use in a form of aneurism like the axillary, where the artery leading to the tumour is usually fairly accessible. Yet I can imagine a case where pressure has been tried and failed, where the condition of the patient or of the artery renders the surgeon unwilling to risk the operation of ligature, and where there is evidence of the presence of a good deal of clot in the sac. In such circumstances there would, I think, be a fair opportunity for attempting to dislodge a portion of this clot, and push it into the distal opening of the sac.

The well-known case of spontaneous cure of an axillary aneurism reported by Dr. B. Beck* seems to me in point here, as well as Mr. Corner's case related by Poland. In both these cases spontaneous cure followed on some exertion, which appears to have detached a portion of clot, producing unmistakable symptoms of embolism.

Finally, there is the bold proposal of Mr. Syme. Mr. Syme carried out this idea in a case of spontaneous aneurism,‡ which he classes as "axillary," but which was certainly situated lower than axillary aneurisms generally are, for it is described in these terms:—"The tumour was the size of an orange, and extended from the axilla down-

* THE LANCET, Nov. 16th, 1872, and Feb. 10th, 1872.
† Observations in Clinical Surgery, 1861, p. 146.

* Gaz. des Hôp., 1868, p. 45, from the Deutsche Klinik.
‡ Case 2, op. cit., p. 152.

wards.....Finding that the radial artery, having a very high origin, ran over the surface of the sac, I took care to avoid it in laying open the cavity, and then, having turned out the clot, had no difficulty in tying both orifices of the vessel, the pulse at the wrist remaining undisturbed." The operation proved successful, but not without very grave danger following it from diffuse inflammation of the cellular tissue of the limb, threatening of gangrene, and an attack of delirium tremens. And it is open to question whether an equally successful result could not have been obtained without any such danger by compression employed in the same way as in some of the cases quoted above. Unfortunately Mr. Syme regarded the use of pressure for the cure of aneurism in the light of a personal imputation on the surgical skill of the person employing it. This strange prejudice has indeed enriched the literature of surgery with some of its most interesting details, and enabled Mr. Syme to prove abundantly how daring and skilful an operator he was. But the safety of the patient is a higher object than the exhibition of the skill of the surgeon, and I confess that I look on many of these daring and brilliant operations as records of unnecessary danger to which the patients were exposed.

But if the tumour extends so high that pressure cannot be used, whilst its size prevents the use of manipulation, and galvanism or coagulating injections are either contra-indicated or have been tried without success, the choice of the surgeon must lie between the ligature of the subclavian and the old operation. The former is very fatal under these circumstances; the latter is as yet untried, except in cases of ruptured artery such as those operated on by Paget, Syme, Callender, and others.

The form of the sac and its exact relations to the veins and nerves become now matters of the most vital importance.

The great danger in the old operation as applied to aneurisms in the axilla appears to me to be not so much the probability of disease in the coats of the artery where they are tied, though this I think is far greater than Mr. Syme was willing to admit; nor even the difficulty of discovering the lower end of the vessel, though the preparations I have exhibited of this and other forms of aneurism will have proved that Mr. Syme was quite wrong in teaching that the artery always leaves the sac in the immediate neighbourhood of its point of entrance. But in the axilla there are added to these dangers, which beset the old operation in every part of the body, two special difficulties—one resulting from the close connexion between the brachial plexus and the sac, and the other from the very large relative size of the branches of the axillary.

The preparations I have here on the table, as well as the diagrams, show how complicated are the anatomical relations of these aneurisms; nor can I suggest any means by which the surgeon can predict whether he shall find the inner wall of the sac where he makes his incision covered by the nerves of the brachial plexus or not. The sensations which the patient experiences, the paralysis of motion or sensation which he may exhibit, will, it is true, testify in many cases to the fact of pressure on one or more of the cords of the plexus; and the œdema of the limb or the clubbing of the fingers may show that the vein is compressed, and in such cases the operation would only be undertaken with the greatest reluctance. But in no case could the surgeon be at all sure that the incision into the sac would not divide one or more of the main nerves or the axillary vein; and if this did happen, gangrene would in all probability follow. Besides all this, if a large branch opening out of the sac were overlooked, and left unsecured, secondary hæmorrhage would probaby occur as the collateral circulation became developed.

For these reasons I must strongly protest against the doctrine inculcated by Mr. Syme, that the old operation is superior to the ligature of the subclavian artery in ordinary cases of axillary aneurism. In cases of ruptured artery, in which the sac is deficient or imperfect, I admit its necessity; and for cases of aneurism such as I have spoken of, which extend so high that the ligature can only be applied in contact with, or perhaps on a part of, the sac, the surgeon may be justified in selecting it. But any surgeon who chooses to do so must have made up his mind to an operation involving dangers and difficulties which he has no means of foreseeing. He cannot tell where the opening of the artery will be found, nor what parts may be in contact with the tumour he is going to lay open, nor what arterial branches he may have to tie besides the trunk, and he must make all necessary preparations for amputation if it should prove necessary. A preliminary incision above the clavicle, through which the subclavian can be immediately secured in this latter event, is a precaution which should never be neglected.

I hope the facts I have brought under your notice have been sufficient to establish the following propositions with respect to axillary aneurism:—

1. That there are a great number of these aneurisms, both traumatic and spontaneous, which are amenable to gradual, intermitting pressure, when carefully applied to the artery above the tumour.

2. That in cases where this is not possible, from the pain which the patient experiences on pressure, the application of rapid total compression, under anæsthesia, may effect a cure.

3. That the ligature of the subclavian artery is so dangerous an operation, both from its own risks and from the proximity of the sac, that it ought to be restricted to cases where pressure has failed, and to those in which, from the size and rapid growth of the axillary tumour, the surgeon thinks pressure unadvisable.

4. That the old operation is to be preferred to the ligature of the subclavian in cases of ruptured artery; and that it may be practised in cases where, from the elevation of the shoulder or from the extent of the tumour, the surgeon would find it difficult to tie the subclavian, or fears in doing so to injure the sac; but that the anatomical relations of axillary aneurisms render this a peculiarly hazardous proceeding, and the surgeon should always be prepared to amputate if necessary.

5. That in very large axillary aneurisms, if any treatment be adopted, the arm should be amputated at the joint, after ligature of the subclavian.

Aneurisms occurring below the axilla may be divided into arterial aneurisms of the brachial artery, arterio-venous aneurisms at the bend of the elbow, and aneurisms of the arteries of the forearm or hand.

Arterial aneurisms of the brachial artery are almost always the result of wound. Yet cases of spontaneous brachial aneurism are on record. Mr. Birkett gives one such case,* in which the patient was a medical man, and in which cure was effected in four months by compression applied in various ways, assisted by flexion. In this instance the patient was able to attend to the duties of his profession during the whole period. The cure, as Mr. Birkett observes, was due in a great measure to the patient's own tact in managing the compression.

Another and a very interesting case is that recorded by Kade.† This must, I think, be classed as a spontaneous aneurism, though its existence was traced back to a blow received twenty years before.

References are given by Fischer‡ to a case of spontaneous brachial aneurism, related to him by Girzstowt (a private letter): of an aneurism in the elbow, the result of the atheromatous process, in a patient suffering from diseased heart. Digital compression, applied at intervals during six days, cured the aneurism; but the patient died shortly afterwards from cerebral embolism. There are also two other cases, in which, if I understand aright, the aneurism was believed to be spontaneous; but I have been unable to discover the original accounts of these cases.

Denucé reports, in the *Gazette des Hôpitaux*, 1860, p. 170, a case of spontaneous brachial aneurism cured by instrumental compression; and Mr. Birkett tells me that since the publication of his case he has had the charge of another case of spontaneous brachial aneurism at Guy's Hospital.

If we add to these the three cases by Pelletan, Liston, and Spanton, which I shall mention shortly, we have all the cases of spontaneous aneurism of the brachial artery of which I have any knowledge.

Spontaneous aneurism of the brachial artery is therefore a very rare disease, and when it occurs it is generally significant of disease of the heart, and is the effect probably of the lodgment of an embolic clot in a weakened

* Guy's Hospital Reports, Series iii., vol. viii. 1862, p. 310.
† Petersburg, Med. Zeitsch., 1866, vol. x., p. 202.
‡ Prager Vierteljahrschrift, 1860.

artery. Much care should be bestowed on the examination of such a case, and its treatment should obviously not be too active. If there is good reason to diagnose, or even to apprehend, the existence of cardiac disease or extensive arterial degeneration, the patient's life will not in any case be prolonged, and he is a very bad subject for ligature, nor is the disease usually in itself so formidable as to justify the risk; so that persevering attempts at cure by compression (digital by preference) should be made, and the artery is so accessible that they will in all probability succeed.

Traumatic brachial aneurism is still more under the influence of compression. Fischer's table contains references to fifteen cases which seem to have been merely arterial, at least in which there is no mention of any injury to a vein. Digital compression was successfully used in twelve of these cases; in the thirteenth, in which digital and also instrumental indirect pressure failed, direct pressure effected a cure; in the fourteenth case the brachial artery was tied, but the patient died from erysipelas. In the remaining case digital pressure failed, but no further treatment is recorded.

If from any cause digital pressure cannot be employed, or if it has failed, it is easy to apply instrumental compression, either by means of a tourniquet (Skey's or Signorini's) or by some impromptu contrivance.

In these aneurisms if compression fails it may be a question whether the old operation is not better than the Hunterian ligature, for the sac is often imperfect, and coagulation consequently either very slow or altogether deficient.

The symptoms of arterio-venous aneurism at the bend of the elbow, the result of unskilful bleeding, are too well known to need any mention in this theatre, although the disease is, now at least, very rare in this country. The treatment, before the introduction of digital pressure, when any was adopted, consisted usually in the incision of the sac, and the ligature of the arterial orifices. Instrumental pressure did occasionally succeed, but not very often, on account of the venous congestion which it caused, and the Hunterian ligature was justly discredited. Such cases as that of Sir C. Bell, of which the preparation is on the table, where he tied the artery above a tumour of this sort, and the patient died of gangrene, showed both the inefficacy and the dangers of tying the artery at a distance from the sac; while the old operation is not very dangerous, and is indubitably curative. I may notice that in many of the recorded cases, as in Sir C. Bell's, the wounded artery has not been the brachial itself, but the radial—a high division. When the case seemed to be rather of the nature of aneurismal varix than of varicose aneurism, it was usually left to itself.

Digital pressure, however, even applied only to the artery above, has frequently effected a cure. Fischer's tables above referred to give twelve cases, nine of which were successfully treated by digital compression. In one of the others the sac was laid open and the vessels tied, but death took place from pyæmia. The ultimate result of the others is not given. In some of these nine successful cases the pressure was applied to the artery only; but in at least four of them, digital compression was applied both directly to the venous orifice of the aneurism and indirectly to the artery leading to it.

Vanzetti, in the *Gazette des Hôpitaux*, 1864, p. 672, thus describes his method of compression in two cases of arterio-venous aneurism.

In the first case (which was a very small tumour originating in a wound forty-five days previously) he noticed that when he pressed the finger very lightly on the basilic vein at the precise point where the scar was, and where the vein was a little swollen, he stopped the continuous thrill altogether, while the intermittent pulsation became more apparent, thus showing that the orifice of the vein was closed. This pressure was exercised by one compressor, care being taken not to press heavily, so as to exercise any pressure on the tumour itself, but only so much as to close the venous orifice, whilst another person compressed the brachial artery in the usual way.

This was begun at 6 P.M. At 9 o'clock the patient felt fatigued, and went to bed, thus interrupting the compression for a quarter of an hour. By midnight the pulsation was perfectly stopped and the tumour solid. No apparatus was afterwards used; the arm merely kept bent for a time. The cure was perfect, and the little tumour disappeared entirely.

In the other case, where the tumour was older (five months and a half in duration) and somewhat larger, the compression was made by the same person on both vessels, the humeral artery being compressed by the thumb of the left hand, its fingers applied round the arm, while the right thumb was pressed on the basilic vein, which ran over the internal surface of the tumour. The venous thrill was suppressed in five hours, and all pulsation ceased in another hour.

In the *Gazette des Hôpitaux*, 1867, p. 505, is a third case (under the care of M. Franzolini) in which the same plan was followed. In sixty hours the venous thrill had ceased (the compression having been carried on as continuously as possible), and from this time the case was treated as a common aneurism, except that on one occasion (ninth day) a feeble thrill was thought to be felt, and on this account four hours of simple continuous compression of the vein was employed; the thrill then definitely ceasing. The patient then left the hospital, and the intermitting digital compression was carried on at home. He was finally reported cured on the sixtieth day, and the cure was verified afterwards, but at what time I do not know, the date being misprinted.

Now that we know the efficacy of direct pressure thus applied in conjunction with indirect compression of the artery for the cure of varicose aneurism, may it not be worth while to treat cases of aneurismal varix by the prolonged application of that slight amount of pressure which would probably suffice in many of them to close the venous orifice? Allowing that in many of these cases the symptoms are not urgent, still the disease is worth curing, if it can be done without danger.

Lastly, we have aneurisms below the bend of the elbow. These are usually traumatic, and therefore generally affect the most superficial parts of the vessels and those most exposed to injury—the radial and ulnar near the wrist, or the palmar arch. But spontaneous aneurism of the arteries of the forearm is by no means so rare as used to be thought. It usually depends either on diseased heart (the aneurism arising probably from embolism), or is a symptom of extensive disease of the arteries. In either case the patient's general condition is of far more importance than the local mischief. This preparation and drawing* is a good instance of the dependence of an ulnar aneurism upon disease of the heart, the patient having also embolic blocks in the spleen and kidney.

This beautiful little preparation from our museum (No. 1697) shows an aneurism of the radial artery which, from the continuation of the coats of the artery into the sac, Mr. Erichsen seems inclined to regard as being spontaneous. No history, however exists.

On the subject of spontaneous aneurism occurring below the axilla an interesting paper will be found in the *Medical Times and Gazette* for 1865, vol. i., p. 517, by Mr. D. Spanton. A case is related in which a woman, twenty-three years of age, had an aneurism of the brachial and radial arteries and a vascular inflamed tumour of uncertain nature in the ball of the thumb, all in the same arm. There was also a cardiac murmur. Instrumental pressure somewhat diminished the pulsation of the aneurisms, but it was not judged desirable to do anything further. The aneurisms were not occasioning any symptoms, and seemed to be very slowly increasing, if at all.

Mr. Spanton, after recording the history of this, certainly very rare, case, gives the result of his researches in surgical literature, and of inquiries at forty-one of the principal provincial and metropolitan hospitals for instances of spontaneous aneurism occurring below the axilla. He discovered, in the books he consulted, three recorded cases of spontaneous aneurism of the brachial artery—one by Pelletan,† a second by Liston,‡ and the third Mr. Birkett's case above referred to; and four cases of spontaneous aneurism of the arteries of the forearm—one by Guattani in the palmar arch,§ in which, however, it seems doubtful whether it was really spontaneous or traumatic; a second, by Sir A. Cooper,

* Preparation and drawing from St. George's Hospital Museum, VI., 220.
† Clin. Chir., tom ii., p. 4.
‡ Practical Surgery, p. 18.
§ Erichsen's Observations on Aneurism, Syd. Soc., p. 316, case 31.

of the ulnar;* a third, by Mr. C. De Morgan, also of the ulnar;† and a fourth, quoted by Mr. Erichsen as recorded by Mr. Todd, in which the precise artery affected is not specified. Mr. Spanton's inquiries at the hospitals resulted in the discovery of only three other cases: Mr. Pollock's, of which the preparation is on the table; one at the Norwich Hospital, of aneurism near the bend of the elbow; and a third at Newcastle, of spontaneous aneurism of the palmar arch. No treatment was pursued in any of these. This makes altogether eleven cases of aneurism in the forearm, in which disease of the heart was proved to exist in five, and suspected in a sixth. In the older recorded cases no data exist on this point. Compression was tried in three of these eleven cases, but with no benefit.

In the *Medical Times* of Aug. 12th, 1865, Mr. Haynes Walton relates a case of spontaneous aneurism of the ulnar artery cured by the constant application of a compress to the artery above the tumour, and for a time to the tumour itself; and I have found a very short notice of a case which is not included in Mr. Spanton's list, published by Schmidt in the *Archiv f. Heilk.*, third year, 1862, p. 569,‡ of spontaneous aneurism of the radial artery just above the wrist, which is also remarkable as being, I think, the earliest recorded age for the occurrence of aneurism. The patient was only twenty weeks old when treatment was commenced, and the aneurism had been noticed at the age of eight weeks. It was cured in two months by instrumental compression.

Apart from the concomitant disease of the heart or great vessels, these aneurisms are easily curable. Even in the presence of such disease, they are very frequently treated with success. Thus Mr. Hamilton, of Dublin, has recorded§ a case of spontaneous aneurism of the ulnar artery in a patient with diseased heart, where, after a patient trial of compression and flexion, the brachial artery was tied with success; and I have notes of a similar affection of the upper part of the radial artery, in which the brachial was successfully tied, notwithstanding the existence of extensive disease of the cardiac valves. The case occurred at the Liverpool Royal Infirmary in the year 1867.

This preparation from the museum of Guy's Hospital shows an aneurism of the ulnar artery near the elbow from a man fifty years of age, who was under Mr. Poland's care at Guy's Hospital. Digital pressure for five hours only procured the consolidation of the aneurism; but the patient died a month afterwards from the bursting of an aneurism on the brain.

Traumatic aneurisms also are often curable by compression, although this plan of treatment also often fails. This appears to me to depend mainly on the formation of the sac. If the sac is completely formed, of stout resilient tissues, compression is likely to succeed. If, on the other hand, there is a weak, flaccid tumour, which collapses a little but does not disappear when the pulsation is stopped, leaving an ill-defined bag of fluid blood, the probability is that pressure will fail, though I do not know that under ordinary circumstances there is any objection to making trial of it. If the patient were nervous and irritable, likely to be depressed by failure, and sensitive to the pain of pressure, I should think it better to perform the radical operation at once. I may observe, however, that in aneurisms of the upper extremity one objection which is felt to the use of compression in other situations is obviated—I mean the confinement to bed which it necessitates. Many cases are on record, such as Mr. Birkett's of spontaneous aneurism of the brachial, Mr. Haynes Walton's of the same affection in the forearm, and Dr. Wales's‖ of traumatic aneurism in this situation, showing that all forms of aneurism below the axilla may be successfully treated by instrumental compression, the patient all the time enjoying the benefit of fresh air and exercise, which no doubt must tend to his recovery. The last-named author, in describing his case, calls especial attention to this.

My list of 337 cases of aneurism contains thirteen below the bend of the elbow; seven of these are said to have been traumatic, and an eighth (a case of aneurism of the palmar arch) probably was so. It was cured by direct pressure. Indirect pressure was tried in three of the seven cases, and in two with success; in the case where pressure failed, and in three others, the clots were turned out of the tumour and both ends of the artery tied, and in all instances with success. In the remaining case (ulnar traumatic) it is merely noted that the ulnar artery was successfully tied. There was a ninth case, in which an aneurism (presumably traumatic) of the palmar arch had been cut into before the patient's admission into hospital, and where the hæmorrhage proved fatal. A similar accident occurred in this case, Y, 76, from St. Thomas's Hospital. The brachial artery was tied, but the patient sank. There remain four cases of spontaneous aneurism, one of the radial and three of the ulnar artery. Digital compression was used successfully in one case—Mr. Poland's; the brachial was tied successfully in two cases—in Mr. Hamilton's after the failure of pressure, in that at the Liverpool Infirmary as a primary operation. In the remaining case compression of the brachial failed, but the man was near his death from aneurism of the aorta, so that nothing further was done, and he died a month afterwards.

In Fischer's tables are references to thirteen cases in which digital compression has been employed, none of them being comprised in my list. One of these was a spontaneous aneurism of the ulnar, in a patient with diseased heart, one a spontaneous aneurism of the radial, with no note as to any concomitant disease. In the former* compression failed, and nothing further was done; in the latter† it succeeded. There remain six cases of traumatic aneurism of the radial and five of the palmar arch. All but two were cured by compression. In one of these two cases the injection of perchloride of iron, and in the other "the ligature," effected a cure.

It will be seen from this that, in traumatic aneurism of the arteries of the forearm, there is good prospect of cure by digital pressure. When this has failed I should myself be always in favour of the ligature of both ends of the vessel, not being aware of any case in which it has failed. They have, it is true, been treated with success in various other ways—by the injection of perchloride of iron, as in the case just referred to;‡ by the action of chloride of zinc, causing the total extirpation of the sac;§ and, I believe, by galvano-puncture, though this was tried unsuccessfully in a case under Mr. Pick's care at St. George's Hospital last year.‖ It is even possible that cures may have been effected by the Hunterian ligature. But all these methods are, to say the least, quite as dangerous as the simple incision of the sac, and far more uncertain, so that I see no reason for submitting the patient to any such experimental surgery. I would refer to Goyrand's case¶ of brachial aneurism (sometimes incorrectly quoted as axillary), in which two injections of perchloride of iron sufficed indeed to consolidate the aneurism, but at the expense of dry gangrene and amputation of the forearm.

In those cases of spontaneous aneurism in which, after the failure of compression, the surgeon wishes to proceed further, the brachial artery should, I think, be tied. But we should remember that many of these tumours seem to be of embolic origin, and it is the opinion of many good pathologists** that such aneurisms are slow to rupture. It is only, then, in case of rapid growth of the aneurism, or some exceptional condition, such as pain from the neighbourhood of a nerve, that any such operation should be contemplated.

* Lectures on Surgery, p. 78.
† Med. Times and Gaz., Nov. 22, 1862.
‡ See also Gurlt's Jahrb. for the same year.
§ Dublin Quart. Journ., Nov. 1863.
‖ American Journal of Medical Science, July, 1864, p. 273.

* C. De Morgan, Med. Times, vol. ii., 1862, p. 543.
† Lendersdorff, Laug. Arch., iii., 415.
‡ Velpeau, at the Soc. de Chir., Sept. 12th, 1860.
§ Nélaton: Journ. de Méd. et Chir. Prat., May, 1862.
‖ See my Lectures, THE LANCET, vol. ii. 1872, p. 397.
¶ Union Méd., 1865, No. 67.
** For example, Prof. R. W. Smith, Dublin Quarterly Journ., Nov. 1873.

DONATIONS TO MEDICAL CHARITIES.—The London Hospital has received £1000 from "H. L. M." in aid of the special fund for the enlargement and maintenance of the hospital. The Lock Hospital has received £1000 from "E. F. S." The British Home for Incurables has received a fifth £1000 from "C. D. T." The North London Consumption Hospital has received £1000 from "P. J. W." The Metropolitan Convalescent Institution has received £1000 from "R. G. F." Mr. William Jessop, of Alfreton, has given £210 to the Earlswood Asylum for Idiots.

REMARKS IN REFERENCE TO SERVICE ON THE GOLD COAST.

BY C. A. GORDON, M.D., C.B.

SEVERAL inquiries having of late been received by me with regard to the conditions of the Gold Coast, and their probable bearing upon the health of British soldiers, I am inclined to offer a few remarks on this very important question in the pages of THE LANCET. The physical aspect of the tract of country extending inland from Cape Coast Castle has been in some respects amply described in recent articles, yet I think without any special account of the conditions which give to that part of Africa its character of extreme unhealthiness. The rock consists, for the most part, of soft ferruginous granite, friable and readily decomposed. A succession of rounded hills of moderate elevation, intersected by narrow, winding valleys, the whole covered with impenetrable underwood or "bush," with occasional tall trees towering above all, give to the country an attractive look; but from the fact of the intervening valleys not admitting of free perflation, from whatever direction the wind prevails, the products of rapid tropical decomposition, aided as they are by the hygrometric state of the atmosphere, hang over particular spots like clouds, and poison, like so much mephitic gas, those who are exposed to their influence. So well understood is the poisonous character of those emanations that residents close the doors and windows against the land breeze, and usually burn the air in their bedrooms by placing in it a chauffer of lighted charcoal at a safe interval of time before they retire for the night.

That there have been young men on the Gold Coast, as in all other parts of the world, who have by their own habits induced disease and death is a fact beyond denial. It is no less true, however, that the mortality thus caused is but a very small item indeed in that which prevails among our countrymen there, and that, in reality, the abstemious and temperate are by no means seldom the first to succumb. When, in 1824 and 1826, white troops of the old African corps served on this part of the coast, circumstances in regard to them were very different from what they now are. The men were desperate and reckless characters; the knowledge of hygiene possessed by medical officers was not acted upon to the extent it now is; and, as results, we learn that the rate of mortality among them amounted to 1200 per 1000 per annum: in other words, the duration of the life of each man upon the coast was one month. It would be unfair to anticipate so very sad a result at the present day; yet, bearing in mind that the physical conditions upon which much of the sickness really depends are the same in 1873 as they were half a century ago, it is right to acknowledge that sanitation has indeed a heavy task before it.

Experience of wars against "uncivilised" enemies has, over and over, shown that they are at times *resolved* by a casualty such as could hardly be calculated upon under opposite circumstances. Let us hope that a similar "consummation" may occur with regard to Ashantee. In the event of no such good fortune befalling us, however, some points of difficulty unquestionably present themselves. The bush is impenetrable. How are serviceable roads to be made? The "protected" tribes are disaffected, and of little use if they were well disposed: white men cannot, it is feared, be depended upon to work long. How, then, is a railway to be made? Animal transport there is none, and it is more than doubtful if any can be maintained, even if landed; everything has to be carried upon the heads of natives, and thus their capabilities become very small. In all probability, most of the crops and of the villages of the Fantees have been destroyed by the Ashantees; rendering it necessary to carry, with every force that may advance from the coast, supplies of food and means of shelter. It is not meant to assert that these difficulties are insurmountable. Possibly they may be overcome; and, in so far as sanitary measures are concerned, they could not be left in better hands than those of the distinguished principal medical officer of the expedition. We must acknowledge, however, that they exist, and that they have to be overcome.

It would appear by published statements that floating hospitals are to be stationed off the coast for the reception of sick; and it has been proposed to establish sanitaria at various places, as Fernando Po, Ascension, &c., to which patients may be sent for recovery. My experience on the Coast leads me to believe that, although floating hospitals have assuredly many advantages, neither they nor sanitaria established at the places indicated can be looked upon as substitutes for the immediate and direct removal to the United Kingdom of all men who suffer to any considerable degree from climatorial disease. Frequently the surf at Cape Coast runs so high that communication with the shipping is difficult or even impracticable. It therefore seems very necessary to have sufficient accommodation on shore for all who require it, and it so happens that ample space exists a little to the westward of the Castle for the erection of huts and all necessary buildings for the purpose. I consider that nothing short of immediate removal home of men who fall sick will be sufficient for their recovery, and that a man who once is prostrated by endemic disease will be of no further use during the present expedition. Only those who have themselves been ill on the Coast can understand the intense craving for home felt by them. The sense of being unable to return acts as a most powerful depressant upon them; so the prospect of return has an equally stimulating and beneficial effect. Similar results have been observed elsewhere. For example, during the late China war a sanatorium was established at the Cape of Good Hope, and thither some of the sick were sent from Hong-Kong. These men, however, saw no benefit in the proposed change. The Cape was nothing to them; they would be as much abroad there as in Hong-Kong, and therefore, if they were to die, why not let them die in the one place as in the other? Such is an example of what sick soldiers actually feel and express. On the Gold Coast all these feelings will be intensified, and hence I believe the necessity of providing amply in this country for sick soldiers, and for sick officers also, and despatching both classes without delay to England.

Another point I would desire to mention. I have been solicited to draw up a few simple rules for the guidance of soldiers themselves, the intention being to have them printed upon cards, and one such card given to each individual. I have, as a matter of course, willingly acceded to this request, and I now append the suggestions I have prepared with this view.

SANITARY HINTS FOR SOLDIERS ON SERVICE IN WESTERN AFRICA.

1. Avoid needless exposure to the sun, rain, night-dews, and fogs.

2. After being exposed to the sun, bathe the head, face, and if possible the whole person. If wet, change your clothing with the least practicable delay, and rub yourself with a rough towel. If exposed to dews or fogs, take a cup of hot coffee or soup, and a little quinine wine.

3. Avoid stagnant water, or such as contains "bush" plants, whether they be dead or living. Use only such as is filtered or otherwise purified. On the march, or while at work, cold tea is the best beverage. Rinse the mouth before swallowing the first draught, and take only two or three mouthfuls at a time. This will relieve thirst as effectually as a longer draught.

4. Avoid all spirits or other "drink" offered by natives. All of them are more or less unwholesome to Europeans, and may be absolutely poisonous. Whenever a ration of spirits may be considered necessary for purposes of health the medical officers can recommend it.

5. The moderate use of tobacco in *smoking* may have its use during the prevalence of damp malarious fogs. In excess, however, it ceases to have any good effects, at the same time that it produces those that are injurious to health. In no other form than smoking has it any good effect whatever.

6. In regard to food, the more you restrict yourself to the rations issued to you the better it will be for health. If in the bush be careful to have in your havresack a small supply of pepper, mustard, salt, onion, and perhaps a lemon rind. Have also the means of heating the contents of your mess-tin. In this way you may be able to have a hot and savoury repast.

7. To guard against the bites of insects, apply a little lime-juice to the hands and face.

8. In the "bush" beware of unknown fruit. Some kinds, tempting in appearance, are poisonous in reality.

9. Cleanliness of person and of clothing should be as far as possible observed. The daily use of a tooth-brush and powdered charcoal for the teeth is enjoined. The under clothing should be changed as often as possible, and if it cannot from any cause be washed, it should be hung up in the sun and well shaken.

10. A respirator or veil of thin linen or cotton gauze worn over the face may act as a guard against malaria in the "bush." Vegetable fibre was long ago found to be useful in the West Indies in this way.

11. Never lie down upon the bare ground nor in the thick grass. In the one case you run risk of attack by fever or dysentery, in the other of snakes, scorpions, &c. Avoid remaining in the vicinity of newly turned-up soil.

12. Do not believe in your own strength, however great it may be, being "proof" against climate. The belief will sooner or later prove delusive. You can lessen the risks and severity of illness by due care and precautions, but the attempt to *brave* those risks will surely and speedily end in your own prostration.

13. The sooner, on being attacked by illness, you consult your medical officer the better your chance of recovery. If you suffer from headache, dislike to food, pain or sense of coldness in the loins, you are probably about to have an attack of fever. If from gnawing pain, coldness in the stomach, and repeated occasions to visit the *rear*, you have the early stage of dysentery. In either case medical treatment should be immediately sought.

MOGADOR AS A WINTER RESORT FOR INVALIDS.

BY ARTHUR LEARED, M.D., F.R.C.P.,
SENIOR PHYSICIAN TO THE GREAT NORTHERN HOSPITAL.

TANGIER was recommended in former numbers of THE LANCET as a suitable winter climate for invalids suffering from affections of the lungs. After having visited most of the towns on the Morocco coast, there is one other place where I stayed some weeks, of whose climate I can speak very highly.

The town of Mogador is in latitude 31° 30′ N., or nearly a degree south of Madeira, and its position is very peculiar. It is built partly on rocks and partly on the sandy shore of the Atlantic, in such a way that in certain states of wind and tide the place is surrounded by the sea without being ever flooded. Fully exposed to the cooling and ventilating action of the trade winds, the town is remarkably healthy, notwithstanding imperfect sanitary provisions and the crowded state, in part, of its population of about 14,000 people. M. Beaumier, consul of France, a resident there for a great number of years, has made the climate his special study. He has kindly furnished me with the accompanying abstract of his observations for an entire year (see opposite page).

From the end of November to the commencement of April, but chiefly in February and March, there are copious rains of short duration. They occur when the wind blows from west and south-west. The south wind sometimes blows with great violence, and then occasionally there are thunderstorms. Rain at times continues for three or four days together. But, from the notes which M. Beaumier has appended to the above tables, the winter cannot be regarded as wet. All the rainfall of the year occurred on twenty-eight days; fourteen of these days were between Jan. 6th and May 5th inclusive, and fourteen between October 24th and December 31st inclusive. The days free from rain, therefore, within the period named—in other words, the fine days of winter and spring—numbered 166, against 28 on which rain, on some days only as showers, fell. As a rule, the sky is clear and the climate most enjoyable.

Rain rarely falls during summer and autumn, and they have a remarkably low and uniform temperature. A strong north-east wind then prevails along the coast from Cape Cantin as far as Mogador. At the north of the town there are reefs of rocks, upon which the waves break with great violence. The spray is carried into the town by the wind in the form of pulverised sea-water; and at times people's clothes, hair, and beard become saturated with the saline particles. This is regarded as very healthful, but it has a practical disadvantage: iron rusts, and leather and other articles become mouldy in spite of care. The north-east wind is the great benefactor of the place. When the temperature rises the wind increases in force, after which the thermometer again falls. It begins to blow about 9 A.M., and increases in force until about 3 P.M., when it gradually decreases until midnight, and from that hour the night is calm.

It is remarkable that the sirocco (S.E. wind), the terrible scourge which is experienced with fatal effects a little inland, is very seldom felt at Mogador. The towns to the north of Cape Cantin, as well as those of the interior, are more or less subject to it. This immunity is explained by the position of Mogador. It is in the latitude of the Great Desert, but is situate far enough towards the west to be outside the range of the S.E. or Desert wind. Places a little farther north are situated in its burning track. On rare occasions a perfect calm, continuing for a day or two, occurs; and this is the worst weather experienced at Mogador. The temperature then may reach 80° F., and the sky, usually very bright, is overcast; the atmosphere seems thick, and a sense of fatigue and sleepiness is experienced.

There are a few places in the world for which exemption from phthisis is claimed with more or less truth. It is not generally known that Mogador may be added to the number. My friend Dr. Thévenin, who has long practised there, and at whose dispensary (founded by the benevolent Sir Moses Montefiore) I had the best opportunities of seeing the numerous cases which presented, is of opinion that phthisis never originates in the place. Dr. Despine, who preceded Dr. Thévenin, during a residence of thirteen months met with five cases. One was that of a Jew from London; the second was a negro from Timbuctoo; the third was an Arab from the mountains; and all three were diseased when they came to Mogador: but the two remaining cases he considered to have been locally developed. At all events, as even my own limited experience will allow me to say, the disease must be of extremely rare occurrence. Out of the large number of cases in which I was consulted, or that passed under my inspection, one only, that of a young Jew, presented phthisical symptoms. This gentleman had resided abroad, and his symptoms pointed much more to the results of chronic pneumonia than to those of tubercular phthisis. This is the more remarkable, as in Algiers indigenous phthisis is far from uncommon, and in some parts of Mogador, especially in the Jews' quarter, the factors supposed to be mainly productive of phthisis are in full operation—namely, overcrowded and unventilated dwellings, bad drainage, constant intermarriages, poverty, and food of the worst kind. Can it be that this happy exemption is due to the peculiar saline impregnation of the atmosphere from local causes already described?

A paper appeared in the *Marseille Médical*, "Mogador et son Climat," par V. Seux, Médecin en Chef des Hôpitaux de Marseille, Professeur à l'École de Médecine, &c., to which I am indebted for some of the foregoing statements. After having passed in review the advantages and drawbacks of the several climates of Egypt, Algiers, Cannes, Nice, Mentone, Pau, Hyères, Amelie les Bains, Vernet, Venice, Pisa, Rome, Naples, Palermo, Malaga, and Madeira, Dr. Seux expresses an opinion that Mogador will be found superior to all. He says, speaking of phthisis, "Les climats qui conviennent le mieux aux personnes en proie à cette maladie sont ceux où les écarts de température sont les moins fréquents et les moins prononcés; or, il ensemble qu'à ce point de vue, Mogador l'emporte sur toutes les stations connues." Elsewhere he says: "Convaincu que Mogador offrait un climat qui n'avait peutetre pas son egal dans le monde, j'ai cru devoir écrire ce que je savais sur ce pays, comme je l'ai fait pour d'autres sujets, chaque fois que j'ai entrevu la possibilité d'être utile à mes semblables; utile si je puis, telle a toujours été ma devise." This is remarkable testimony in favour of an almost unknown African locality from a man of professional position and experience, himself a resident in the sunny south. My own observations, supported by the statements of M. Beaumier, Dr. Thévenin, and many other residents with whom I have conversed on

SUMMARY OF METEOROLOGICAL OBSERVATIONS MADE AT THE FRENCH CONSULATE, MOGADOR, DURING THE YEAR 1869.

Year 1869.	Barometer.				Thermometer (Centigrade).				Direction of the Wind. Observations made three times daily.										State of Sky. Observations made 3 times daily.			Observations.
	Maxima.	Minima.	Averages.	Averages of the month.	Maxima.	Minima.	Averages.	Averages of the month.	N.	N.E.	E.	S.E.	N.W.	W.	S.W.	S.	Calm.	Variable	Clear.	Hazy.	Cloudy.	
January... 1st to 15th	769°	754°	763·88°	764·585°	18°	14°	15·83°	17·23° = F. 63°	...	30	...	1	...	5	4	5	...	...	30	15	...	1 sirocco (E.S.E.) on Jan. 31st.
January... 16th to 31st	767	760	769·29		26	16	18·64		...	36	...	3	...	...	5	4	...	...	36	12	...	Thermometer rarely shows 26°.
February 1st to 14th	769	764	765·71	765·050	24	14	17·10	16·70 = F. 61·8	...	27	...	7	...	4	2	2	...	...	22	20	...	1 rain on the 6th.
February 15th to 28th	769	760	764·40		20	13	16·30		...	23	2	1	...	5	5	...	6	...	23	19	...	7 rains: 3 the 18th, 3 the 19th, and 1 the 24th.
March..... 1st to 15th	765	754	759·354	760·500	22	15	17·29	17·21 = F. 63	1	29	...	...	...	9	1	...	5	1	27	18	...	7 rains on the 9th, 11th, 14th, and 15th.
March..... 16th to 31st	766	756	761·645		22	15	17·18		...	29	1	...	...	3	...	...	15	...	43	5	...	3 rains on the 22nd, 24th, and 29th.
April..... 1st to 15th	765·50	757	761·48	762·390	25	15	18·05	19·31 = F. 66·7	...	26	...	...	1	1	...	3	14	...	39	4	2	1 rain on the 1st.
April..... 16th to 30th	768	755·50	763·30		23	17	19·66		2	31	1	...	...	...	1	...	10	...	40	2	3	1 shower on the 23rd.
May..... 1st to 15th	764	756	760·06	761·100	23	17	20·22	20·17 = F. 68·3	...	25	...	...	...	7	2	...	11	...	37	8	...	1 shower on the 5th.
May..... 16th to 31st	766	757	761·65		24	18	20·12		...	39	...	...	1	1	2	...	5	...	45	3	...	
June ..... 1st to 15th	768	756	762·40	762·200	27	19	21·58	22·10 = F. 71·7	...	23	...	...	...	11	1	1	9	...	39	3	3	
June ..... 16th to 30th	764·50	759·50	762		27	19	22·62		5	26	...	...	1	...	...	...	13	...	40	...	...	
July..... 1st to 15th	764·50	760	762·71	761·636	26	20	22·33	22·05 = F. 71·6	...	36	...	...	...	...	...	...	9	...	40	...	5	
July..... 16th to 31st	763	758	760·562		25	20	21·77		...	48	...	...	...	...	...	...	...	...	49	...	...	
August ... 1st to 15th	765	760	761·224	761·267	26	20	22·33	22·76 = F. 72·8	...	35	2	...	...	...	...	...	8	...	37	4	4	
August ... 16th to 31st	764	759	761·290		27	21	23·20		...	25	...	1	...	...	...	...	21	1	38	2	8	1 sirocco on the 27th at 8 P.M.
September 1st to 15th	764	756	761·444	761·910	26	20	21·31	21·20 = F. 70·1	...	42	...	1	...	...	...	...	2	...	40	4	1	
September 16th to 30th	765	760	762·377		26	19	21·09		...	22	...	...	...	1	...	...	22	...	39	2	5	
October ... 1st to 15th	765	759	762·88	761·726	25	19	21·16	20·36 = F. 68·5	...	19	...	...	...	...	...	1	25	...	37	5	3	
October ... 16th to 31st	765	755	760·573		24	15	19·54		...	29	1	...	...	1	...	1	15	1	40	7	1	2 showers on the 24th and 30th.
November 1st to 15th	766	758·50	762·90	763·810	22	16	18·82	18·17 = F. 64·5	...	6	...	...	...	...	...	...	38	1	37	8	...	3 rains on the 6th; 2 storms on the 7th and 13th.
November 16th to 30th	771·50	758·50	764·73		21	14	17·53		...	25	...	...	1	3	4	5	7	...	36	9	...	2 rains on the 23rd and 24th.
December 1st to 15th	770	750	761·233	761·802	19	13	19·85	15·34 = F. 59·3	3	17	1	1	1	5	5	...	12	...	30	14	1	9 rains on the 4th, 5th, 6th, 10th, and 11th.
December 16th to 31st	770	755	762·375		18	12	14·83		1	15	...	1	...	4	4	...	23	...	34	14	...	4 rains on the 24th, 25th, 30th, and 31st.
Summary for the year 1869	Maximum: 771·50°. Nov. 28th... ...				Maximum: 27°. June 13th and 27th; Aug. 18th, 19th, and 30th.				N.	N.E.	E.	S.E.	N.W.	W.	S.W.	S.	Calm.	Variable	Clear.	Hazy.	Cloudy.	Total: 2 siroccos and 41 rains or showers.
	Minimum: 750°. Dec. 6th...				Minimum: 12°. Dec. 26th and 29th.				12	663	8	16	5	59	36	22	270	4	—	—	—	Last shower May 5th. First shower August 24th.
	Average of the year ... ... 762·025°				Average of the year ... ... 19·383°				—	—	—	—	—	—	—	—	—	—	—	—	—	2 storms.
	Maximum.		Minimum.		Average.																	
Results of the preceding years 1866-67	773·50° ...		746° ...		762·10°				9	567	5	5	2	112	27	18	331	10	913	144	38	28 rains or showers and 1 storm.
1867-68	774 ...		745 ...		762·30°				23	699	19	8	4	38	30	28	274	5	880	104	24	43 rains or showers; 11 storms; 1 sirocco. Thermometer rarely marks 30°.

Note.—The thermometer (Centigrade, by Lejà) was suspended in the shade in an inner gallery of the Consulate house. The barometer (Holostériques, by Lejà) was very carefully corrected. When the index stood at 760°, variable weather was generally indicated, the wind being E.N.E. or N.N.W., sometimes stormy, with a clear sky. When it pointed below these figures the wind ranged from W.S.W. to S.S.E., with a cloudy sky. The index at 750° was accompanied by rain and wind. When it pointed lower, still worse weather was indicated.

the subject, lead me to endorse all that Dr. Seux has advanced.

Mogador is not so inaccessible nor so remote as the infrequency with which it is visited would lead a stranger to suppose. There is direct communication with London by means of a line of good steamers, sailing monthly, and making the voyage in about a fortnight. Delay is caused on the African coast by the steamers calling at several ports before reaching Mogador. Another mode of reaching it is by the Peninsular and Oriental steamers to Gibraltar, and then crossing to Tangier, at which point English and French steamers call to convey passengers and goods to the southern coast towns.

The accommodation for invalids at Mogador is at present limited. There is no hotel, but a small and comfortable boarding-house is kept by two Jewish ladies. Provisions are good and very cheap; and there are many excellent houses available for visitors if a demand for them existed. The resident physician, Dr. Thévenin, is a gentleman of experience, and held in universal esteem. It may be mentioned that the leading English merchant of the port is, from his own observation, so convinced of the advantages to be derived by invalids at Mogador, that he has most liberally offered to provide house-room free for a limited number of a poor class of patients during the ensuing winter.

The amusements at Mogador are those which the invalid should mainly seek—those of an out-door kind. First, there is the passive enjoyment of a delicious climate, with a sky of such deep blue, and sunsets of such grandeur, Italy can hardly match. There are rides along a firm sandy beach, until at a short distance the country is reached. This is well wooded, varied, and affords good partridge shooting. For those who prefer it, the sea yields abundance of sport in the shape of fish new to the visitor. With all their faults, the Moors are quick-witted, obliging, and fond of the English. To this brief account much more might be added in favour of Mogador as a health-resort, but space obliges me to conclude.

Old Burlington-street.

ON THE

USE OF THE FORCEPS IN MIDWIFERY.

BY JAMES MORE, M.D.

MY late revered master, Sir James Simpson, in lecturing to his class, used to warn all young accoucheurs against the habit of carrying the forceps with them when called to a labour. This caution, however, arose as much from a laudable desire on his part to restrain the too ambitious interference of the beginner as from any positive belief as to the danger in the application of this instrument.

In one of his most brilliant papers—that on the numerical method of investigation as applied to surgery—he clearly shows the value of statistics in all clinical work; and surely, if they are of any value at all, they are eminently so when applied to the results of the different methods of treating and delivering the parturient female.

No one doubts now that these and similar investigations all point to the one great law (law in the sense of an observed order of facts) that, beyond a given point, the longer the labour the greater the danger to mother and child; and, as a corollary of the above, the longer the labour the more tedious the recovery of the mother.

As has been pointed out of late by two or three writers on this subject, the teaching of the schools is not in accord with the actual practice of many practitioners, both in town and country. We are told in our manuals and by our teachers that the forceps is a perfectly safe instrument, and yet so many obstacles are thrown in the way of its justifiable use that the generality of practitioners look upon it with dread and suspicion, and use it only when they are obliged to do so, and only when the safety of any instrumental interference has been eliminated from the case. That I am not singular in holding this idea is very evident from what Dr. More Madden says in his interesting pamphlet on this subject: "Some years ago the forceps was hardly ever resorted to until the parturient woman, worn out by the protracted sufferings she had endured, was almost moribund, and when, too, the child was probably dead in consequence of the long-continued pressure it had been subjected to. And yet, as I could show you by a reference to the statistics of this hospital (the Rotundo), in forceps cases the mortality to the mother is always less in proportion to the frequency of the operation, as well as to its early performance in those cases which require it."

Keeping in view the law, that the maternal and infantile mortality attendant upon parturition increases in a ratio progressive with the duration of labour, are we not justified, nay, are we not bound, to use every means in our power to shorten that duration; provided always that can be accomplished with safety to the mother and to the child? Many maintain that as long as the head advances, though ever so slowly, instruments should not be employed. Some say, Wait on, leave it to, Nature! And even though the head be stationary or fixed in a position favourable for the use of the forceps, wait, they say, four, six, or even twelve hours before you attempt to deliver the woman from her sore travail.

With all due deference to the mighty ones who have laid the foundations and further advanced the structure of this branch of our art, I humbly enter my protest against any such principle. If it is at all justifiable to assist in the delivery of a breech case, or of the placenta, it must be so to apply the forceps. We help the breech down, and are justified in doing so, in cases where we know Nature could and would ultimately accomplish delivery. We extract the placenta almost immediately after the child is born, and are justified in doing so; yet Nature would, in a large proportion of cases, accomplish this some time within the hour. I have a very high respect for Nature as a *vis medicatrix*, but, so far as my individual experience goes, she makes a sorry midwife. Why, even among the lower animals, especially those in a state of domestication, we find that unless art step in, the parturient female often fails to bring forth its living offspring. Any shepherd could tell of ewes and lambs lost from causes similar to, if not identical with, those seen in women. Delay with them seems fraught with very decided symptoms. In the mare, too, the average duration of labour is so short that the careful attendant knows well that if his case goes beyond a certain time there is danger. "Is not a cow like a duchess?" She is, and in so far as that the *ars obstetrica* must come into play in the one as in the other. It is not so with those animals which are, strictly speaking, feral, but with animals which are domesticated, and lead a somewhat artificial life, the act of parturition is fraught with contingent evils, over which mother Nature has little or no control. It may be difficult to say with precision what is a state of nature as regards woman, but we do know that women in the higher circles of life do not, as a rule, represent this ideal. We know also that since the introduction of machinery, more notably the sewing machine, neither the lady in the middle nor the factory girl in the lower class can be looked upon as living under any other than artificial conditions. Nature can, and does, accomplish much, but she cannot accomplish the delivery of women under conditions as favourable as those brought about by the art of the moderately skilled accoucheur; and simply because, as society is at present constituted, there are introduced into this natural process of parturition adverse conditions, pathological states, and complications, which quite place that process beyond the control of the venerable mother.

There would seem, then, to be a point of time beyond which danger or unfavourable conditions are apt to manifest themselves; and it may be broadly stated as a fact that labours of six hours' are safer (other things being equal) than labours of twenty-four hours' duration. And Sir Jas. Simpson shows by statistics that the mortality to mother and child is tenfold greater in labours prolonged beyond thirty-six hours than in labours terminated within the first twenty-four hours.

It is unnecessary to enumerate the complications which may and often do arise in tedious and protracted labour, but these would seem to range themselves under one or other of the following heads:—

1. Danger arising from exhaustion, either of the nervous, muscular, or circulatory systems.

2. Dangers arising from mechanical pressure.

It is only necessary to mention, as coming under the first category, rupture of the uterus and post-partum hæmorrhage; while in the second we have placed prominently before us inflammation or sloughing of vaginal, rectal, or vesical walls, with all their concomitant evils—these on the part of the mother; on the part of the child, death or cerebral lesion from compression.

It is with something akin to pain that I look back on the early years of my career as a country accoucheur. Imbued with the scholastic dread of interfering with "old Nature," and consultation not always being attainable, I have painful memories of allowing these poor but confiding women to remain in strong labour for ten, fifteen, or even twenty-four hours, knowing well all the time that harm would accrue. But why, asks some accomplished accoucheur, did you not help with ergot?—why, asks another, did you not use forceps? Simply because, in the first place, my experience of ergot, even then, was that in a large proportion of cases it did more harm than good; and, in the second place, I had been taught to avoid the use of instruments so long as there was *any* progress, and my ideas of the forceps were (something like a Calvinist's in matters of his religion) more imbued with the dangers than with the advantages, more alive to the horrors than to the blessings of the instrument. Then do I blame my teachers? Certainly not. They taught up to the thought of the day. But gradually and surely our ideas are undergoing modification on this point, and ere long, we think, it will be forced upon the attention of the schools the propriety of establishing a more thoroughly competent system for teaching surgical midwifery. Since commencing practice I have had nearly one hundred forceps operations, and looking over those of them which I have carefully tabulated I am forced to the conclusion that the *mere use* of this instrument does not interfere with, or retard, but rather tends to help, the recovery of the mother, and that "the timely use of the forceps, shortening the second stage of labour, is the great practical improvement in recent midwifery." (On this point see the evidence of Dr. Thorburn, Mr. Rigden, Drs. Hamilton, Lawrence, Milne, and last, though not least, Dr. Clarke, of Oswego, whose paper is quoted in the *Dublin Quarterly Journal of Medical Science*, Jan. 1872.)

I must here mention that a great portion of my midwifery is what is called by the *financial* part of the profession "low midwifery"—i. e., made up of that unfortunate class who cannot afford to give the accoucheur a higher fee than ten or fifteen shillings. Luckily, the chief aim and end of our profession is not that of taking fees. We are not tradesmen grubbing for money, but we are, I hope, men of science searching for truth; and so it comes about that these poor and heavily troubled creatures are not all obliged to yield themselves up to the limited skill of the venerable mother aforesaid, or to the greed and ignorance of the great unqualified.

But, though paying so low a fee, these cases furnish to the accoucheur data of great and special importance, and for this reason: The wife of a working man, as anyone but the *financier* may know, has "no time to lie a-bed," and does invariably get up on the *third* or *fifth* day, seldom, if ever, keeping on her back till the ninth day, which is the legitimate and correct period of the higher and more respectable classes. This very necessity of getting about *as soon as possible* at once furnishes us with a standard of comparison of very great value. Thus, if I look into the details of the last fifty cases of forceps operation on my register, I find these women commenced their usual household or their factory work at periods ranging from the third to the tenth day, under circumstances completely favourable as to feeling, actual state, and general condition. Now let any accoucheur compare these results with those obtained from an observation of fifty cases of natural and uncomplicated labour, and he will perforce come to the conclusion that the forceps cases made as good and as quick recoveries as the cases of strictly natural and unassisted labour. Again, take these same fifty forceps cases and compare them with another series of fifty cases of tedious or protracted and unassisted labour, and it will be found that, while the former approach very near unity as to rapidity and perfection of recovery, the latter depart considerably from this standard of excellence—if I may be allowed the expression—inasmuch as, setting aside altogether the rate of mortality, many will make more tedious recoveries and depart further from the healthy or natural standard as measured by time, and this we would set down as the tenth day. In plain English, the assisted cases get about sooner and feel better than the unassisted cases do. If this is the case—and who will now deny it?—can we doubt that the more frequent use of the forceps becomes not only justifiable, but a matter of duty? By their more frequent use we would not only lessen the maternal and infantile death-rate, but, by eliminating all or most of the causes of death and other pathological states, we would bring our patients nearer a healthy standard of recovery.

But it may be objected that the duration of recovery is too uncertain a quantity to be used as a standard of comparison, and that my statistics must be too elastic, and only an approximation to the truth. But the same objection can be urged against vital statistics of all kinds. Medicine is strictly an uncertain science, and all that the numerical method can do is to give an increased weight of probability to the truth of our investigations. Dr. Barnes, in his admirable lectures on the Convulsive Diseases of Women (THE LANCET, May, 1873), says: "The laws of numbers are infallible, but not so the perceptions and the reports of observers; nor are individual cases of disease constant uniform quantities like abstract figures. I think the true clinical physician will prefer to base his judgment as to the value of different methods of treatment upon careful observation of the action of remedies and close critical comparison of cases." This is all I pretend to do. I compare the recovery in a given number of forceps cases with the recovery in a given number of tedious and protracted labours, using the tenth day as the general and natural standard, and I find the forceps cases have the best of it.

In conclusion, I would just enumerate the class of cases in which I think it justifiable and obligatory to use the forceps.

1. In *all* cases where the first stage of labour is completed and the head stationary in a position favourable for their use. Under these conditions I would not wait longer than two hours.

2. In cases where, though the head is advancing, the labour is tedious, from the fact of the pains being too weak or having almost ceased.

3. In cases where the pains are stronger than is warranted by the advance made.

4. In hæmorrhage, if excessive; and in some cases of convulsions.

5. In cases, favourable for operation, where the patient is very desponding or impatient.

6. In cases of a tedious nature where there is a rigid fourchette or a lengthened perineum, especially where the pains are not steady in rhythm and force, and where mother Nature seems bent on rupture. In reference to this class of cases I make no apology for quoting from a report of Dr. Clarke's paper in the *Dublin Quarterly Journal of Medical Science*, Jan. 1873. He says: "If rigid peritoneal tissues be the obstacle, the danger of their laceration will be lessened by the forceps. The wedge-like form of the proximal end of the locked blades is an important aid in dilatation. It prepares the way; meanwhile it diffuses the bearing of the uterine force along the longitude of the vagina, lessening its intensity at any point. Moreover, the experienced practitioner will remember that a majority of the cases of laceration of the perineum occur when, after long delay at that point and many ineffectual pains, the uterus, as if vexed with the futility of its efforts, with one tremendous throe suddenly bursts through the obstacle. Reflex power, when repeatedly foiled, does thus accumulate. The forceps, by securing the steady progress of the head, in some degree obviates the danger."

7. In cases of occipito-posterior positions, unless the labour is advancing quickly. I have had four cases of the above presentations during the last year. Three were in the third position, and one in the fourth. There was delay in all. All I had to do was to rotate the head so that the presentation became occipito-anterior.

8. The second twin, if a head-presentation, and not advancing quickly after the first.

9. To save time—i.e., if the case is favourable for forceps—I do not scruple to use the means at my command of relieving the woman from travail and myself from work.

Rothwell, Northamptonshire.

CASE OF POISONING BY COAL-GAS.

BY F. DE CHAUMONT, M.D.,
SURGEON-MAJOR,
ASSISTANT PROFESSOR OF HYGIENE, ARMY MEDICAL SCHOOL.

IN December, 1870, Mrs. B——, aged eighty-two, her grandson, a man of thirty-eight years of age, and her granddaughter, about thirty, lived in a small four-roomed house, semi-detached, on the road which runs along the shore at Itchen Ferry, opposite Southampton. The gas company had recently laid down pipes along this road, and immediately opposite the house, about six feet off, a syphon was placed in the ground. The pipes and syphon were not laid very deep, and had been in the ground for some months, but had not been tested for leakage, except soon after being first laid down. In the meantime severe frosts had occurred. The gas was first turned on in these pipes on the evening of Dec. 2nd, but the inhabitants of the house in question do not appear to have noticed any particular smell before retiring to rest, which they did at their usual hour, from 9 to 10 P.M. The old woman and her granddaughter occupied the front room and the grandson the back room on the first floor. On the morning of the 3rd of December the milkman called at the usual hour (between 7 and 8 A.M.), but was unable to obtain admittance, and on returning after his round found the door still shut. By this time, however, the neighbours had begun to be alarmed for the safety of the inmates, and at last, about 9.30 A.M., it was decided to break open the door, which was accordingly done, and the apparently lifeless body of the younger woman was found in the passage. She was removed to a neighbour's house, and, under the care of Dr. Symonds of Woolston, was soon restored to consciousness. The dead body of the old woman was found in the front room, and that of the man—who appeared to have died in sleep—in the back room. The house was perceived to be filled with a penetrating smell, variously described by those entering it as paraffin, gas, &c. Most of the people had never smelt gas before, and the odour was therefore strange to them, but it was easily recognisable even a week after, when I visited the house myself. The account of the occurrence was obtained from the survivor, and was as follows. As above mentioned, the grandmother and granddaughter slept in the same room, and had retired to rest before 10 P.M. About 11.30 P.M. the granddaughter awoke feeling very ill, and the grandmother also awoke complaining of uneasiness. Soon the younger woman became violently sick, and, feeling a little better after that, was easily persuaded by her grandmother to lie down again. She appears to have fallen asleep, but woke up again about 12.30 with great headache and a sense of suffocation. Not being able to rouse her grandmother, she took the light (a small benzoline lamp) and rushed to the door to call for help. When she reached the head of the stair, which is straight and steep, extreme giddiness came over her, and she remembered nothing more. She seems to have fallen headlong to the bottom, where she lay insensible until picked up in the morning when the house was broken into. She was much bruised, and the lamp she carried was found crushed and flattened under her.

An attempt was made on behalf of the Gas Company to throw the blame on other causes (even on the small benzoline lamp), on account of the gas not having time to reach that point; but it was conclusively proved that the gas was actually burning at 9 P.M. on Dec. 2nd at a point at least half a mile beyond. On examination, the syphon in the roadway in front of the house was found to be cracked, and the soil (which consists of loose gravel) between it and the house was highly charged with gas, which seemed to have passed under the wall of the house and up through the floor of the sitting-room, for the smell was strongly marked under the floor planking and in the wall cupboard. The front room (over the sitting-room) occupied by the two women was of about 500 cubic feet capacity, and the back room (over the kitchen), where the man slept, about 400. Both were destitute of means of ventilation; for the windows were closely shut, and the fireplaces boarded up and pasted carefully over at all parts with brown paper. Even a week afterwards, when the windows had been constantly open and the rooms unoccupied, the carbonic acid was as follows: front room (women's), 0·746 volumes per 1000; back room (man's), 0·934. In all probability the young woman's fall was the means of saving her life, by bringing her face to the brick floor of the lobby on the ground-floor, along which a free current of cool fresh air passed from the spaces under the front and back doors. It is also probable that had there been means of ventilation active in the upper story the other cases would not have been fatal.

The post-mortem examinations (which were performed, four days after death, by Dr. Sims of Southampton and Dr. Symonds of Woolston) showed the following conditions:—Extensive ecchymosis of a bright-red colour on the dependent parts of the back, arms, and legs. The dura mater in its external surface much congested. On the upper surface of the two hemispheres the arachnoid had an opaque appearance, with some white spots studded about. The pia mater greatly injected, of a bright-red colour. Substance of the brain of a bright-red colour, with numerous bloody points in it. A small quantity of bloody serum issued from the spinal canal. A little serum in the pericardium; right auricle full of coagulated blood; blood generally fluid. Frothy mucus issuing from the mouth; tongue congested. Trachea highly congested and of a bright-red colour, containing a moderate quantity of mucus. Lungs not much collapsed, dark in colour, and crepitant. Bronchial membrane much congested and of a bright-red colour; bloody frothy matter in great quantity issuing from the tubes. Stomach healthy; kidney, liver, and spleen congested.—N.B. The man had only one kidney.

At the inquest, held at Itchen Ferry, the jury brought in a verdict in accordance with the evidence: that the deceased met their deaths from the effects of poisoning by coal-gas, caused by a defect in the syphon of the company's main. The survivor received compensation from the company for the personal injury she had suffered.

Woolston Lawn, Southampton.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

CASES OF HERNIA.

(Under the care of Mr. HULKE.)

WE propose publishing seven cases of hernia which have recently been under the care of Mr. Hulke, but space will permit of only three appearing this week. Of the cases, five were strangulated, one incarcerated, and one only partly reducible. In the five strangulated cases the sac was opened four times, all ultimately doing well. Three of the cases were femoral, two scrotal, one inguinal, and one labial. It will be seen that the strangulation occurred in the cases that were recent, or in which the bowel had not been down for some time. This is intelligible when it is borne in mind that if the bowel be kept within the peritoneal cavity the orifice of the sac tends to diminish in size by the formation of adhesions in the peritoneum at the mouth of the sac and the development of thick bands of connective tissue under the peritoneal coat, so that a considerable amount of resistance is offered to the descent of the viscera; but should the bowel come down, it is firmly compressed or even strangulated by the constricted and unyielding orifice. On the other hand, if the intestine be allowed to remain in the sac, enlargement of the orifice is produced by the constant pressure of the viscera.

Strangulated, oblique, scrotal hernia; taxis; ice; herniotomy; sac opened; antiseptic dressing; rapid recovery; afterwards diarrhœa and tenesmus caused by scybala in rectum.—A brewer's drayman, aged twenty-three, a stout, large man,

was admitted at 7 P.M. on May 20th into Broderipp ward. The right inguinal canal and right half of scrotum were distended by a large swelling, the scrotal part being about nine inches in its long axis. The testis was distinguishable below it. The patient was bent double with pain, and tossing restlessly about. Ice and the taxis had been already tried. He said that he had been ruptured from childhood; had never worn a truss; the bowel only occasionally slipped down, and till now he had always got it back. At 4 P.M., whilst hurrying to the railway station, he felt it descend, and symptoms of strangulation quickly followed.

Chloroform was given, and the taxis, tried for a few minutes, failing, herniotomy was done under antiseptic precautions. Reduction was not possible until the sac had been opened, which contained much omentum, and a long loop of dark-purple bowel, with a quantity of bloody serum. The wound healed directly.

On June 2nd, his belly being rather uneasy, an enema of warm water was given, and brought away a hard, knotty stool. On June 7th, whilst convalescent and only waiting for a truss, he had tenesmus, and on exploring the rectum it was found blocked with scybala, on the removal of which the mucous diarrhœa and forcing down ceased.

Strangulated femoral rupture; herniotomy; sac opened; recovery.—A married woman, aged thirty, was admitted into Bird ward on April 4th, at 1 o'clock P.M., with symptoms of strangulated hernia. Frequent vomiting of peasoup-like matter; severe pain in the epigastrium; sunken features; small, weak, rapid pulse In the right groin, below Poupart's ligament, a tender, painful, tense oblong swelling, the inner end of which slipped into the femoral canal. She said that at 1 o'clock A.M. on the 3rd inst. she awoke with great pain in her belly, which was soon followed by retching, and a few hours later the rupture was first detected. Ice and the taxis had been tried.

As the symptoms were urgent, herniotomy was at once resorted to under chloroform. Reduction without opening the sac was not found practicable. The sac was opened, and its neck divided, which allowed the finger to pass into a smooth pouch above the crural ring, but not into the peritoneal cavity. On tracing upwards the mesentery, a small tight aperture was felt at some depth; it was manifestly the original neck of the hernial sac, which had at some previous time been detached from the crural ring, and displaced upwards. After pulling it down, and cutting it, reduction was easily accomplished. The wound was dressed antiseptically, and nearly the whole united immediately. The first stool was passed on the sixth day.

Strangulated hernia complicating a suppurating pelvic hæmatocele; recovery.—A parlour-maid, aged twenty-four, was admitted into Bird ward at 7 P.M. on Jan. 30th, with symptoms of strangulated hernia, which had begun three days before. She had constipation, frequent retching, great tenderness of belly and pain, dry tongue, quick feeble pulse, and a painful and tender tumour in the right groin of the size of an orange. The taxis had been already tried. A bag of ice was laid on the rupture, and opium was given her. At midnight, when seen by Mr. Hulke, the house-surgeon thought that the swelling was less. It was now scarcely conspicuous to the eye, but easily definable by touch, no longer tense, and the contents felt granular, like omentum. This change made it probable that some of the contents of the sac had returned into the belly, but the general symptoms continued, which made it necessary to operate. The sac, which was extremely thin, was opened, and a quantity of omentum fixed by old adhesions was found in it, but no gut. As the omentum was very indurated, it was tied with a carbolised catgut thread and cut off. The operation was done under antiseptic precautions, and the wound dressed strictly after Lister's method. After recovering from chloroform, a grain of opium was given, and it was directed to be repeated as often as might be necessary to relieve pain. The belly was covered with a linseed poultice.

Jan. 31st.—8.30 A.M.: Has retched four times; belly above navel less tender; has taken three grains of opium. Ordered bismuth and hydrocyanic acid, after a couple of doses of which the vomiting ceased.

Feb. 1st.—She now said that she had some disorder of the womb, and the vaginal orifice was found patulous; the uterus very low and fixed, its cervix smooth and very tender; through the rectum a large hard mass was felt behind the uterus, very broad from side to side, and so large that its upper limit could not be reached. The examination caused exquisite suffering. The tenderness over the front of the belly was now almost restricted to the hypogastrium. The condition was regarded as metritis and pelvic abscess. Four leeches were applied to the cervix uteri. The opium and poultices were continued.

2nd.—Face slightly jaundiced. Catheter had been required ever since the operation. The wound quiet; partly united. Between 10 and 12 P.M. she passed three loose stools, resembling thin watery pus, and without fæcal odour. Temperature now 103·8°. Wound has opened and is suppurating.

3rd.—Voided two more stools of similar appearance.

4th.—Catamenia appeared, with great aggravation of the abdominal pain. Her gums have become swollen and spongy, and easily bleed. She also had labial herpes.

5th.—Passed per anum a quantity of clear, ropy mucus, like white of egg. It was voided suddenly with irresistible straining. She could hardly wait till a bed-pan was brought.

A few days later some grumous blood resembling coffee-grounds escaped per vaginam.

She remained in hospital until the middle of April, when her friends took her home apparently dying. For some days after the journey death seemed imminent, but she rallied, and finally made a good recovery. A daily report of the case would occupy too much space. During the remainder of her stay in hospital she frequently voided large quantities of glairy mucus, and sometimes pus per anum, and the size of the pelvic indurated mass was found to vary, but at no time could fluctuation be detected either per vaginam or per rectum. The swelling mechanically obstructed the latter canal, causing fæcal accumulations above the block. Retching recurred several times, and was always stopped by bismuth and prussic acid. The hernial wound sloughed, and the catgut ligature was thrown off *en masse*. It was not disintegrated, but had the form of a swollen white cord.

ST. BARTHOLOMEW'S HOSPITAL, CHATHAM.

A SERIES OF MULTIPLE FRACTURES.

(Under the care of Mr. A. W. NANKIVELL.)

1. J. D——, a woman aged forty-six. Admitted Dec. 20th, 1870. On admission the patient was found to have sustained a double Colles' fracture. A pistol-shaped splint was applied to the back of each arm, a short straight one being used for the front. Discharged cured Jan. 25th, 1871.

2. T. D——, aged forty-nine. Admitted Aug. 7th, 1871. The left femur was fractured at the junction of the lower with the middle third; fracture simple. The right femur was comminuted at its middle third. Long splints (Liston's) were applied. Discharged Oct. 11th. Left femur quite firm; right rather weak. To the latter a starch bandage was applied for a few weeks.

3. M. A. W——, aged twenty-five. Admitted Oct. 16th, 1871, suffering from a simple fracture of the left humerus, a compound comminuted fracture of the left radius and ulna, two inches below the elbow, and a Colles' fracture of the same arm. Angular and straight splints were applied. During her stay three pieces of bone were removed from the compound fracture. She left Nov. 29th, the humerus and the Colles' fracture being quite firm, the radius and ulna partially so.

4. M. A. S——, aged twenty-eight. On admission, March 31st, 1872, she was found to be suffering from a compound comminuted fracture of the upper end of the left humerus, a compound fracture of same humerus into the elbow-joint, a simple fracture of the left radius, and the neck of the right femur was also broken. Patient was in a state of collapse. Appropriate splints were applied, but, notwithstanding the free administration of stimulants, she died on April 3rd.

5. T. H——, a lad aged fifteen, fell from the mast of a barge on Oct. 15th, 1872. When admitted, he was found to be suffering from a fracture of the external plate of the skull over the right frontal sinus. He had also a Colles' fracture of the left radius. The arm did well; but a portion of the skull necrosed, and was removed when loose. Discharged Dec. 4th.

6. M. S——, a woman beyond middle age, fell out of a window, March 4th, 1873. She sustained a fracture of the external plate of the skull, over the left frontal eminence, a fracture of the lower jaw to the left of the symphysis, a simple fracture of both radii, and a compound fracture of the left middle finger. The upper lip was also cut through for two inches transversely. On March 25th the finger was amputated for necrosis. The case was discharged quite well on May 14th.

7. J. V——, a labourer, aged thirty-nine years, was brought to the hospital, March 26th, 1873, suffering from a compound comminuted fracture of the right tibia and fibula, a comminuted fracture of the left clavicle, and a scalp wound six inches in length over the vertex of the head. A McIntyre splint was applied to the leg, and the left arm bandaged to the side. Sutures were inserted in the scalp. On March 28th a loose piece of bone was removed from the tibia. The scalp and clavicle did well; not so the leg, which failed to unite, notwithstanding that a starch bandage was applied on June 5th, and the patient allowed to get about. Discharged on June 21st, wearing the starch. After this the man attended occasionally. On examining the leg on August 7th the fracture was found to be much firmer.

8. J. H——, aged six, was on admission, March 27th, 1873, found to be suffering from a fracture of the lower jaw, a comminuted fracture of the right humerus into the elbow-joint, and a compound fracture of the right thigh. Carbolic oil and a long splint were applied to the thigh, and suitable splints to the other fractures. The different bones united readily, and the child was discharged May 14th, cured.

9. T. R——, a labourer, aged thirty-five, was admitted May 9th, 1873, suffering from a compound fracture of the right thigh at the lower part of the middle third and a simple fracture of tibia and fibula, middle third. A long splint and carbolic oil were applied. The splint was removed July 8th, and the man left the hospital quite cured a week later.

These cases serve to illustrate the severe injuries which the human frame can sustain without causing death or even permanent disability. In one only of the nine cases did a fatal termination follow, and death was caused in that case (No. 4) from collapse. The only case uncured is the ununited fracture of the leg (No. 7), and even he is progressing favourably, but slowly. The absence of head symptoms in the cases of fractured skull (Nos. 5 and 7) is probably due to the fractures being confined to the outer plate.

ROYAL UNITED HOSPITAL, BATH.

DIFFUSED ANEURISM OF THE RIGHT POPLITEAL ARTERY; LIGATURE OF THE FEMORAL; SECONDARY HÆMORRHAGE; LIGATURE OF THE EXTERNAL ILIAC; SECONDARY HÆMORRHAGE; GANGRENE OF THE FOOT AND LEG; AMPUTATION; DEATH.

(Under the care of Mr. GORE.)

THE subjoined case exhibited one of the most perplexing contingencies that can occur to the surgeon — namely, secondary hæmorrhage from a large artery of the lower limb that has been ligatured in continuity. Three courses of procedure have been suggested: first, to cut down upon the bleeding point and treat the case as one of wounded artery; but this is attended with so much difficulty that in the majority of cases it is useless. Secondly, it has been proposed to attempt to save life and limb by the means adopted in this case—that is, to tie the vessel at a higher point. Against this it has been argued that the ligature of the artery at the proximal side will either not arrest the hæmorrhage, or will almost certainly be followed by gangrene. Rash as it may appear, we are therefore led to the horrid necessity of amputating the limb at once, whenever uncontrollable secondary hæmorrhage sets in after ligature of the main vessel in the lower limb. Experience has, however, shown that, whatever method of treatment be adopted, the accident is almost invariably fatal.

For the following notes we are indebted to Mr. H. Cullifford Hopkins, house-surgeon:—

W. A. B——, aged thirty-five, a labourer, was admitted Nov. 20th, 1872, suffering from a large tumour on the inner side of the lower third of the thigh. He was quite well about eight weeks ago, but about that time he experienced considerable pain in walking; a fortnight afterwards his leg began to swell, first around the calf, and then above and to the inner side of the knee. He had been laid up a fortnight, and on Nov. 14th was seen by Mr. Budd and Mr. Brown at the Eastern Dispensary, who recommended his removal to the hospital. His previous health had been good.

On admission he was a man of average height but of a sallow complexion. The leg was swollen and hard, and extending up from the popliteal space on the inner side of the thigh was a large tumour the size of a cocoanut; at its most prominent part it measured twenty inches and a half in circumference. When pressed with the hand, no distinct pulsation was felt, but when pressure was applied in the groin, the tumour yielded, and gradually filled again when the pressure was removed. The conclusion arrived at was that the tumour was a diffused aneurism of the popliteal artery. Ordered a grain of opium to be taken when necessary, and the leg to be wrapped in cotton-wool.

On November 22nd, at 2.30 P.M., bichloride of methylene having been administered, Mr. Gore proceeded to tie the femoral artery. The artery was easily reached by an incision of about four inches in length in Scarpa's triangle, and a ligature applied. After the operation no pulsation could be felt, but the size of the swelling was not much diminished. The patient was placed in bed, the leg wrapped in cotton-wool, and a hot-water bottle applied to the foot. No sickness followed the operation, and at 8 P.M. he was comfortable and in no pain. Temperature 100·8°; pulse 88.

Nov. 23rd.—Had a fair night, free from pain; feels much easier since the operation; the burning and tingling sensation in the leg and foot which he complained of has ceased; no pulsation; tumour slightly reduced in size. Temperature 101·4°; pulse 82. — 8 P.M.: Foot numbed and cold. Temperature 102·8°; pulse 96.

24th.—Had a very good night (after taking a grain of opium). Tumour much the same; no pulsation. Cold and numbness in foot the same. Temperature 101·4°; pulse 84.

25th to Dec. 1st.—No material change.

Dec. 2nd.—Not such a good night, and is not looking so well this morning. Has had during the night acute darting pains in the knee and ankle. To take a grain of opium every four hours. Temperature 103°; pulse 105.

3rd.—Much better this morning; pains in knee and foot less. Temperature 102·4°; pulse 100.

4th.—Still complains of pain in the knee and foot. Temperature 100°; pulse 100.

5th.—Much the same. Temperature 100·2°; pulse 96.

6th.—Better; had a good night; pain in knee and foot less. At 11.45 A.M. the house-surgeon was summoned by the nurse, who said the patient was bleeding to death. The patient was found to be faint, very weak, and at the point of ligature blood was spurting out freely with a strong jet. Digital pressure above the bleeding point at once arrested the hæmorrhage, and a screw tourniquet was then applied. He had lost perhaps a pint of blood. Gave him some brandy, which revived him. It appears he was asleep, and was awoke by feeling something hot trickling down his thigh. He immediately called out. At 2 P.M. Mr. Gore, who had been sent for, proceeded to tie the external iliac. Methylene having been administered, an incision four inches in length was made a little above Poupart's ligament, and the artery easily reached and secured. Some little difficulty arose in passing the aneurismal needle under the artery, owing to the thickened and condensed state of the tissues. No vomiting followed the operation. To have a grain of opium when necessary, and brandy frequently in moderate quantity. In the evening he was free from pain, and going on favourably. Temperature 103°; pulse 120.

7th.—Had a good night, free from pain. Tumour, though not smaller, is softer. Temperature 102°; pulse 130. At the evening visit, the toes and foot were found of a purplish tint and cold; in fact, gangrene had set in. To continue the opium every four hours. Temperature 102·6°; pulse 120.

8th.—The patient was seen at 1 A.M., and again at 4.30 A.M. At 5.15 A.M. hæmorrhage showed itself in the wound where the femoral was tied. The patient was in a collapsed condition, body cold and clammy. A tourniquet was

applied above the wound, and the hæmorrhage arrested. At 10 A.M. the patient was much worse, was slightly delirious, and picking his bedclothes, also very thirsty. The iliac wound was looking healthy, but the femoral not so. Gangrene increasing. Temperature 103·2°; pulse 120. At 4 P.M. hæmorrhage came on again to a slight extent from the femoral wound. The tourniquet was tightened, and the hæmorrhage ceased. At 8 P.M. he was much the same; gave him a hypodermic injection of two-thirds of a grain of hydrochlorate of morphia. Temperature 104°; pulse 130.

9th.—Slept till 5 A.M.; feels better and stronger; no further hæmorrhage. The iliac wound is looking healthy, and discharging healthy pus. The femoral wound is looking unhealthy. The gangrene has extended to just below the knee. Tumour softer. Temperature 103°; pulse 100.

10th.—Much about the same. Temperature 101·4°; pulse 100.

11th.—Better. Tumour smaller; both wounds looking healthy. Temperature 101·6°; pulse 108.

16th.—Nothing worthy of note occurred till this morning, when he did not seem so well. Tongue dry and brown. Had a restless night. Temperature 103·2°; pulse 104, small and thready.—8.30 P.M.: Hæmorrhage from the external iliac; considerable difficulty in arresting it (lost about 12 oz. of blood); tourniquet failed to do so; after keeping up digital pressure for some time, a bag of shot was applied above the wound, which arrested the bleeding.

17th.—Slept but little; no further hæmorrhage; tongue very brown and dry; is extremely pale and haggard. In addition to brandy to have two pints of champagne daily. Temperature 103·4°; pulse 128.

18th.—Much better night; is looking better this morning; tongue brown and moist. Gangrene has not spread above knee; both wounds are healthier. Ligature of external iliac came away (thirteenth day since operation). Temperature 103·2°; pulse 104.

19th.—Had a much better night; takes his food better. Ligature of femoral came away—the twenty-eighth day since it was tied.

22nd.—Much distress, and loss of appetite. The tumour appears to be suppurating; and whilst dressing the leg the bulk of the tumour disappeared, matter mixed with blood escaping below the knee.

23rd.—Amputation of thigh decided upon. Methylene having been administered, Mr. Gore proceeded to amputate by a flap operation, in the middle third of the thigh. The patient lost very little blood, and recovered from the operation pretty well. No vomiting followed.—8 P.M.: Comfortable and free from pain. Temperature 99°; pulse 120.

24th.—Had a good night, but is very weak. Temperature 100°; pulse 120.

25th.—Gradually sinking; passes urine and fæces involuntarily; is becoming unconscious. Temperature 103°; pulse 140. Death took place at 10.45 P.M.

Pathological condition of the parts.—The artery of the thigh expanded in the popliteal region into a large aneurism, which had become diffused. The coats as far as they could be traced were atheromatous, and were gradually lost in the mass of surrounding tissues. The popliteal vein was filled with solid coagulum. Pus and blood had penetrated the knee-joint, the cartilages of which were destroyed at various points. The external iliac artery was nearly cut through at the seat of ligature. There was a clot above about half an inch in length. Below the ligature a solid clot extended to a point a little below the origin of the profunda. The femoral artery was nearly cut through at the point of ligature, and was completely blocked up by solid coagulum.

THE TREATMENT OF RHEUMATIC IRITIS.—Dr. Fano (*France Médicale*, No. 67, 1873) recommends the following treatment, at once directed against the local affection and the rheumatic diathesis:—Solution of atropine, used in the shape of an eye-wash, and the nightly administration of ten grains of Dover's powder. The patient to be warmly clad in flannel, and to abstain from the use of neat wine, strong coffee, and spirits. The solution of atropine is made to the following strength: Distilled water, five ounces; sulphate of atropine, one grain; to be used in an eye-basin every three hours, during five minutes. The eye to be shaded during the day.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, OCTOBER 14TH, 1873.

DR. C. J. B. WILLIAMS, F.R.S., PRESIDENT, IN THE CHAIR.

CASE OF IMPERFECT DEVELOPMENT OF THE CIRCULAR MUSCULAR FIBRES OF THE RECTUM AND VAGINA.

BY HENRY LEE, F.R.C.S.,
SURGEON TO ST. GEORGE'S HOSPITAL.

THE case is one in which a large accumulation of fæces occurred in the lower bowel. It formed a tumour, which extended six inches above the pubis, and was five inches broad. The perineum was deficient, and also the circular muscular fibres of the lower part of the rectum and vagina. These two passages opened in common. The rectum and vagina were always relaxed, and the uterus very imperfectly developed.

CASE OF IDIOPATHIC HYALITIS; ACUTE INFLAMMATION OF THE VITREOUS HUMOUR OF BOTH EYES.

BY W. SPENCER WATSON, F.R.C.S.,
SURGEON TO THE ROYAL SOUTH LONDON OPHTHALMIC, AND TO THE CENTRAL LONDON OPHTHALMIC HOSPITALS.

A man, aged about thirty years, a coal-porter, was seized with dimness of vision, which increased so rapidly that in the course of a few days he could not find his way across the room without a guide, his aspect being characteristic of amaurosis. The ophthalmoscope revealed an uniformly-distributed turbidity of both vitreous humours. The diagnosis was uncertain, the patient being a free drinker, and having smoked to excess; he had also an ulcer of a suspicious nature on one leg, but no other traces of anything like constitutional syphilis, and no appearance or history of any other disease. Under a course of mercury, rapidly administered to the extent of rendering the gums spongy and tender, vision rapidly improved, and was completely restored in ten days. The progress of the case (taken in connexion with the simultaneous healing of the ulcer on the leg) points to syphilis as the origin of the disease. It is concluded from this case that inflammation of the vitreous may occur, independently of injuries, without any iritis or choroiditis, and without any impairment of the retina. The rarity of the affection and the very rapid improvement under treatment, make the case remarkable.

Mr. HENRY LEE said he wished to make a remark on one point in the paper. It was implied that increased action was necessary for repair. But when increased action was going on in one part, there was a diminution in another; so he would say, a diminution of activity in the hyaloid, not an increase, cured.

Mr. COOPER FORSTER said the author of the paper doubted the presence of syphilis because no scars were found on the penis. If found, they would only indicate one kind of sore; and their absence was no proof that the patient had not had syphilis. He thought the abuse of tobacco had more to do with producing hyalitis than syphilis.

Mr. SPENCER WATSON, in reply, said there was no enlargement of the glands of the groin. He thought the hyalitis was due to syphilis: he had never seen the excessive use of tobacco produce it; its action was rather upon the nerves. He agreed with the remark made by Mr. Lee, that increased action was not necessary for repair.

MEDICAL SOCIETY OF LONDON.

MONDAY, OCTOBER 20TH, 1873.

DR. S. O. HABERSHON, PRESIDENT, IN THE CHAIR.

THE first meeting of this Society for the present session proved a great success; the attendance of fellows and visitors was abundant, whilst the paper prepared for their discussion was of more than usual clinical and practical interest.

The CHAIRMAN opened the proceedings with a short address, in which, after alluding to the recently-deceased fellows of the Society, he congratulated the survivors upon the acquirement of their new premises, and expressed his

hope that the Transactions of the Society would now no longer remain unpublished.

Dr. RICHARDSON read a paper upon

STRICTURE OF THE ŒSOPHAGUS,

giving a general recast of his clinical experience on the subject, and detailing ten cases which had been under his care, in all of which the disease had been of a malignant character, and he had been able to trace a history of the taint; he recognised the strictures due to spasm, and dwelt briefly upon them, but believed persistent organic strictures of the œsophagus to be malignant, and in most cases to possess the history of a cancerous taint. He described their development, diagnosis, progress, and treatment, giving very minutely the points for the differential diagnosis between stricture of the œsophagus from organic change, from thoracic aneurism or abscess, and from tumours pressing upon the tube. His experience had shown the disease to affect both the sexes equally, usually appearing about the middle period of life, the youngest of his cases being twenty-two, the oldest fifty-five; that the constriction was most commonly situated in the middle third of the tube, and generally made painless progress until it caused obstruction to the passage of food, which symptom was frequently the first that called the patient's attention to the disease. The author dwelt upon the expression of great mental depression which was present in these cases, the whole of which progressed to a fatal termination. He said, with regard to treatment, that the use of the bougie or tube for the purpose of dilatation must only be secondary to its use for the introduction of nourishment; that every attention must be paid, in the administration of food by the stomach and rectum, to the introduction of only such matters as could be absorbed by the respective mucous membranes in contact with which they were placed. He considered that dilatation in these cases was often even fatally wrong, and gave the account of one striking instance in which its attempt proved so. To facilitate the efficient introduction of nourishment into the stomach in these cases he employed a bottle constructed like Wolfe's, from which the quantum of well-warmed fluid was propelled by the action of a small bellows; the same apparatus could be used for the administration of enemata by the patients so long as they retained the requisite power. Dr. Richardson exhibited an œsophageal tube, constructed with a central finer slightly longer tube, through which fluid might be injected into the stomach in those cases in which gases would prevent its entrance unless an opportunity were afforded for their exit at the same time. He showed a short tube which he had designed with a view of its being introduced upon a stilet till its upper end was below the glottis; it should be worn during the swallowing of a meal, subsequently to be withdrawn by a cord attached to its upper end. The inventor thought that the necessary manipulation for the use of this instrument might be acquired by a patient. When it was desirable to dilate a constriction of the œsophagus, he considered that pressure should be applied only in a lateral direction, and not at all in a downward one. With this view he had contrived an instrument, one part of which was constructed so as to be capable of distension by the injection into it of air or water. He spoke of the bougie introduced by Mr. Durham as being the best he had met with for the œsophagus; mentioned the importance of maintaining the warmth of the body, stating that a decreasing temperature had marked the progress of his cases, and was not unfrequently followed by rapidly fatal coma. From what he had gathered he was strongly adverse to the employment of gastrotomy in these cases.

Dr. SEMPLE, who commenced the discussion, remarked upon the pathological character of the disease, which he believed to be more often epitheliomatous, though at times fibrous. In the main points he supported the views of Dr. Richardson. Dr. Semple classed cases of stricture of the œsophagus as those which could and those which could not be cured.

Mr. MASON mentioned a case which he had treated successfully by forcible and rapid dilatation, on the suggestion given to him by Mr. Holt.

Mr. DURHAM pointed out that his œsophageal bougies would immediately assume and retain any curve given to them, owing to their being made upon a fine, soft pewter tube, and mentioned the obvious advantage of their shape, especially when it was desired to pass a large-sized instrument through the constriction. He spoke positively as to the occurrence of organic stricture of the œsophagus which was not of a malignant character, such, possibly more often than was supposed, having a traumatic origin, resulting from simple ulceration, or following the exanthemata. He narrated the history of a case of non-malignant organic stricture which he had cured, and spoke strongly in favour of the performance of gastrotomy to relieve the sufferings of those whose cases without it must be agonising as well as hopeless, as also of the comfort derived from the use of a continued milk-and-water bath at the close of these cases.

Shortly after 10 P.M. the discussion was adjourned until the next meeting of the Society, when it was announced that Mr. Durham would bring forward a case in which he had removed from the pleura a foreign body that had been accidentally introduced through a canula inserted for the relief of empyema.

CLINICAL SOCIETY OF LONDON.

FRIDAY, OCTOBER 10TH, 1873.

MR. PRESCOTT HEWETT, PRESIDENT, IN THE CHAIR.

Dr. TILBURY FOX exhibited a living subject affected with

PARASITIC SYCOSIS.

The patient had been sent to Dr. Fox the day before by his medical man, and on being requested to do so, readily consented to exhibit himself. The disease began at the outer angle of the mouth six months ago by a patch of eruption having all the characters of ordinary ringworm of the surface (tinea circinata). This patch gradually spread until it invaded the whole of the left cheek, the left upper lip, and the left half of the chin. The spreading edge of the patch was always red, very well defined, and herpetic; whilst the central portion became pale, and desquamated slightly. The use of remedies destroyed the disease about the cheek, and the malady now consists of a red, slight scaly surface, occupying the left half of the upper lip, a little of the right half of the same, and the whole of the left side of the chin. In addition, there are eight or nine small tubercular swellings, one of which is slightly pustular in aspect, and scattered here and there over the diseased area. These lumps began to come about a month since. The hairs in the site of these little tubercles lie loose in the follicle; they come away very readily; they are swollen, lustreless, opaque, and loaded with fungous elements. The man, in addition, has a small circular patch possessing all the characters of ordinary ringworm in the middle of the chin beneath the jaw. Dr. Fox said that he had only met with two cases of this parasitic sycosis within the last few years. As Hebra denied its occurrence, he thought it important to bring the case under the notice of the Society. He further pointed out the unsymmetrical character of the disease, the origin of the latter from common ringworm, the slow development and indolent character of the small tuberculous swellings, and the absence of any decided suppuration, as points of diagnostic interest; the common non-parasitic sycosis furnishing contrasts in these particulars, no less than in the presence of diseased hairs in the one and not in the other. Dr. Fox placed under the microscope specimens of the hairs invaded by the mycelium of the fungus (microsporon metographytes) and also of the root-sheath, in which the conidia (or spores) were seen in abundance.

Dr. DUFFIN thought parasitic sycosis very rare, and had seen but one such case, in which there was an irregular patch on the lower part of the chin, and another near the right moustache. He had examined the hair, and found spores. The existence of the two varieties had been debated both in Paris and Vienna, but Hebra, who formerly maintained the opposite opinion, now held that there were two distinct forms of the disease.

Dr. THEODORE WILLIAMS brought forward three cases of

SPASMODIC ASTHMA TREATED BY CHLORAL.

The first was that of a married woman, aged twenty-three, who came from the Isle of Man, where, during the last nine months, she had suffered from asthma of so severe a character as to confine her to her bedroom for four months. Various remedies had been tried in vain. On her arrival

in town, Dr. Williams did not at first pursue active treatment, hoping that the change of climate might give relief. The fit, however, coming on as usual, chloral was given in twenty-grain doses. After the first dose she fell asleep for an hour; after the second she slept a whole night; and a few more rendered her breathing quite clear. The drug was then omitted, and the patient remained free from asthma for more than a week.—The second case was that of a lad, aged sixteen, who had been subject for six years to attacks occurring once a week and lasting three days. Chloral was given during a severe paroxysm, with the result of causing sleep and immediate relief to the breathing. He remained in the Brompton Hospital free from attacks, in spite of several threatenings of dyspnœa, which were always averted by the timely administration of chloral. —The third patient was an unmarried woman, aged twenty-seven, with a history of asthma of two years' standing; the attacks occurring every morning, lasting two or three hours, and often recurring in the forenoon. During a very severe one, which occurred in the Brompton Hospital, a variety of drugs were tried with little effect. Chloroform inhalation gave some relief, but caused cardiac intermission. Hypodermic injection of morphia did good, but her increasing lividity precluded its continuance. Chloral was then given in twenty-grain doses, and the first dose induced slumber and easy respiration. The drug was continued in smaller doses for upwards of two months, during which time the attacks seldom recurred, and, when they did so, were extremely mild. Once the chloral was omitted, and the asthma immediately returned, but ceased on resuming it.—All the cases were complicated by catarrhal symptoms, and in the third case there was considerable emphysema, which diminished during the patient's stay in the hospital. Biermer, of Zurich, had already used chloral extensively in these cases. Dr. Theodore Williams's own experience, founded on upwards of twenty cases, was decidedly favourable to the use of the hydrate of chloral in spasmodic asthma. In only two cases had any untoward symptoms arisen.

Dr. REGINALD SOUTHEY remarked that most cases of asthma showed a nervous or hysterical temperament, and that if the disease depends distinctly on a neurosis, the drug acted as a stimulant, and so did good. In one case that had come under his notice nitrite of amyl was decidedly beneficial, though the effect was only temporary.

Dr. A. P. STEWART, in complimenting Dr. Williams on his paper, observed that chloral hydrate was a very uncertain remedy, that it sometimes caused great and alarming depression of the circulation, and usually extreme irritation, with affection of the eyes, &c. He (Dr. Stewart) believed rather in the efficacy of large doses of bromide of potassium, which, in his opinion, was a less perilous remedy than chloral hydrate.

Mr. NUNN asked Dr. Williams if any of his cases were due to special diet, and remarked that various articles of food, as rice, will in some persons cause symptoms akin to suffocation.

Dr. WILLIAMS, in replying, did not agree with Dr. Southey as to the stimulant properties of chloral, demurred to the dangers attending its administration indicated by Dr. Stewart, and thought it a safe remedy, inasmuch as very few fatal cases resulting from its use are recorded, although it is now well known as a domestic medicine. He believed that the cases recorded in his paper were due, not to dietetic, but to climatic causes.

Dr. SOUTHEY read the account of a

CASE OF CHRONIC BRIGHT'S DISEASE IN A SYPHILITIC PATIENT.

The patient, a young man aged twenty-one, had had scarlet fever when a child, and had suffered with dysentery several years previously. The first symptom which led to his admission into St. Bartholomew's Hospital was erysipelatous inflammation of the left ankle, following a trivial injury. His urine was loaded with albumen, but was always excessive in quantity; its daily average was fifty ounces, but on many days more than seventy ounces were passed. His temperature was invariably at or above normal, and he presented very trivial anasarca during his illness. Generally his appetite was good, but at times he suffered in the morning from sickness, and had severe colicky pains. Among the anomalous symptoms noted were the following: bright red patches of erythma came out on different portions of his body, sometimes on the face, at others on the trunk and limbs; they were attended by febrile symptoms, and coppery-coloured stains marked their situation for a while. Their disappearance was usually attended with the most profuse perspirations or critical sweats. These rashes, as well as transient mottlings of the arms and legs, and sudden transitory attacks of acute pain in the calves, loins, and back, were attributed by Dr. Southey to the syphilitic poisoning, of which there was further confirmatory evidence in amygdaloid cervical glands, and scars of old buboes in both groins. After being two months under observation, during all which time the microscopical characters of the sediment of his urine varied very little, fatty and granular casts of varying size being always present, although never in large quantity, he was suddenly seized with rigors of a most severe kind. His temperature rose to 103·2°; he complained of general pains in different parts of his body, and especially of headache, localised behind his ears. This was followed by profuse sweating, which afforded some relief. For three successive days these ague-like attacks were repeated. The abdomen then became tympanitic and tender, and acute peritonitis supervened, to which he succumbed after a few days; his temperature gradually rising up to 106°, which it reached twelve hours before death. At this high temperature he passed into an insensible state, with protruded eyeballs, dilated pupils, and stertorous breathing; but up to this period his intellectual faculties had never been clouded, and he never exhibited any epileptic convulsions. The necropsy revealed old as well as recent peritonitis, large and soft liver and spleen, large, pale, fatty kidneys, the pair together weighing seventeen and a half ounces. All the viscera were examined by iodine, but did not furnish any amyloid reaction.

Dr. SILVER asked if the kidneys were examined for amyloid reaction (to which the author replied in the affirmative), inasmuch as the history of syphilis, the large quantity of urine of fair specific gravity, the large amount of albumen, and the absence of anasarca, all indicated in a marked manner the waxy kidney.

Dr. THEODORE WILLIAMS commented on the copious perspirations that occurred, asked what was meant by "a high temperature liver," and if the kidneys were examined microscopically.

The CHAIRMAN remarked, *apropos* of the syphilitic aspect of this case, that the scars in the groin should not be taken as a matter of course as an indubitable indication of syphilis, asked if amygdaloid glands existed in the other groin, and cited several cases.

Dr. SOUTHEY exemplified the "high temperature liver" definition by referring to Strasbourg geese, and said that amygdaloid glands had been observed in the axilla and the neck.

Reviews and Notices of Books.

Eléments de Chirurgie Clinique: comprenant le Diagnostic Chirurgical, les Opérations en général, les Méthods Opératoires, l'Hygiène, le Traitement des Blessés et des Opérés. Par J. C. FELIX GUYON, Chirurgien de l'Hôpital Necker, &c. &c. 1 vol. 8vo; pp. 672; avec 63 figures intercalées dans le texte. Paris: J. B. Baillière et Fils. 1873.

THIS work on Clinical Surgery is somewhat after the plan adopted by the authors of the well-known "Compendium de Chirurgie." A brief abstract of the history of surgery, from the period anterior to Hippocrates to the eighteenth century, is prefixed. The author treats his subject in three divisions. The first part deals with surgical diagnosis; the various ways of examining surgical patients, and the means of investigation which aid in the diagnosis. Although there is nothing actually new under these headings, the principles enunciated are sound, and the rules laid down are well defined and rigorous. The second portion comprehends surgical anæsthesia, general and local; the rules and general principles governing operations; the several therapeutic indications and various plans of surgical procedure,

including common operations and minor surgery. The subject of Anæsthesia is treated at considerable length, occupying more than fifty pages; commencing with a history of the early attempts to produce insensibility to the pain of surgical operations, and mentioning the recent discoveries of what are now called anæsthetic agents. The author concludes with the following observation:—"Depuis quelques années, cependant, par un retour assez bizarre, le protoxyde d'azote, le premier en date parmi les anesthétiques, a été de nouveau vanté; il offre quelques avantages pour les opérations de la chirurgie dentaire, auxquelles, jusqu'ici, a été borné son emploie."

In defining the meaning of the word "operation" the author proposes to add "with an instrument," after Boyer's definition, so as to exclude dressings and the simple application of caustic, or other physical or chemical agent, from the category of surgical operations. He then proceeds to describe the principles which guide the surgeon in determining upon the performance of an operation, fixing the rules for operating as well as the details of the operation itself.

The fifth section of this part of the book is devoted to "Méthodes Opératoires," which the author subdivides into four classes—(*a*) "modificatrices," (*b*) "destructrices, (*c*) "réparatrices," and (*d*) "conservatrices." Under the third class—"méthodes réparatrices,"—epidermic grafting and the variety of sutures are gone into very fully. The author is evidently a great advocate for the use of sutures, with respect to which he writes:—"A présent on en étend chaque jour l'application. Ce n'est pas, ainsi qu'on pourrait le croit, le fait d'une réaction; c'est la conséquence toute naturelle de l'extension considérable donnée par la chirurgie moderne à l'application des méthodes réparatrices, dont la suture constitue l'un des principaux moyens." This implies a remarkable change in French surgical practice, as those who studied in Paris some years ago will remember how rarely sutures were employed, every device and care in adjustment being adopted in order to avoid the necessity of having recourse to this means of bringing together divided parts. Under "méthodes conservatrices" the author refers to the question of primary or secondary amputation in traumatic cases, evidently leaning strongly towards secondary operations, and quoting with approval the statistics collected by M. Legouest and M. Spillman, the well-known French military surgeons.

Chapter III., which concludes the book, comprehends the care and treatment of wounded, as well as of patients who have undergone surgical operations. It commences with a short section on the actual tendencies of surgery, and then deals with the subject under the headings of General and Local Treatment, the former including hospital hygiene and dieting. The description of the several modes of dressing employed in modern surgery is very complete; and a full account of the various bandages and appliances in use is added.

This work will doubtless be of much service to the diligent student in the surgical wards of a hospital, or it may be read with advantage by the ordinary practitioner; but it cannot be considered as, nor does the author profess it to be, a book of reference for an accomplished surgeon. It is, in fact, a students' book. To quote from the author:—"La qualification de *chirurgie clinique* nous a paru convenir à cet ensemble qui a pour but de réunir ce qui est nécessaire à l'élève pour le guider à l'hôpital, lui permettre de suivre des visites avec l'intelligence des choses qu'il y voit mettre en pratique, et de profiter le mieux possible de ce qu'il est appelé à y faire. S'il remplit son but ce livre serait une sorte de *vade mecum* pour les élèves des services de chirurgie."

Quantitative Chemical Analysis. By T. E. THORPE, Ph.D., F.R.S.E., Professor of Chemistry, Andersonian Institution, Glasgow. London: Longmans and Co. 1873.

THIS is the last published of Messrs. Longmans' "Text-books of Science." All the others have been excellent, and the present is no exception to the rule. It is lucid and compact and is crowded on every page with well-selected analytical methods. Although intended primarily as a students' book, it contains so much recent information hitherto scattered through the journals that it will be valuable to professional chemists, and, indeed, it describes some processes which would hardly be attempted by any one else.

On looking over the pages, one is reminded of the number of useful contrivances which chemistry owes to Bunsen. The filter-pump (well described on page 60) and the self-filling water-bath are examples in the present volume, and the "Bunsen burner," the spectroscope, and the well-known gas-analysis apparatus, with many other ingenious arrangements, may be added to the list. The peculiarly inventive character of Bunsen's mind is seen in all of them, and it is difficult to over-estimate the help they have given to the progress of chemical research.

One of the best sections in the book is the first, on the balance and weighing. The directions for determining the true value of the weights and the limits of sensibility of the balance, for finding true weights in balances which are not quite exact, and for correcting for the weight of air displaced, are very simple and practical. The descriptions of the modern improvements in regard to evaporation, desiccation, and filtration are also excellent. A long section is devoted to water analysis, in which all the best methods, including Frankland and Armstrong's elaborate process, are described, and the volume concludes with a succinct description of modern organic analysis.

Altogether the book is a very useful one, and it appears to be as trustworthy as it is concise and clear.

A Theory of the Causation, and Suggestions for the Prevention, of Dysentery. By MUCOR. Melbourne: G. Robertson, Little Collins-street.

IN this treatise the author starts with the bold and definite assumption that the sole cause of all dysentery is the exposure of human excrement upon the surface of the ground under certain conditions of moisture and warmth, and consequently leads to the conclusion that an individual on a desert island who daily buried his evacuations, could not, even amid the most deadly climatic surroundings, by any possibility be affected with the disease.

His theory of causation is, that fæcal matter in moist weather is invaded by cryptogamic fungi—say of the *physomycetous* kind; that when this mildew has passed through the successive stages of fructification, the sporules and other minute portions of the plants are desseminated by the air-currents of the day, and suspended in the dews of the night, and that to the inhalation or ingestion of these, dysentery is due.

Although we may hesitate to accept this "reasoning by induction," unsupported by any practical proof, yet we are not in a position to deny the possibility of such explanation; and as Mucor has entered on the domain of these most interesting "moulds," we hope that further research, whether it establish or refute his theory, may add something to our present limited knowledge of their influence.

Enthusiasm in the advocacy of his own idea has led the author into a diffuse and discursive style, and there is no doubt that a reduction in the number of pages would increase the list of readers.

My Garden: its Plan and Culture; together with a General Description of its Geology, Botany, and Natural History. By ALFRED SMEE, F.R.S. Illustrated with 1300 Engravings. Second Edition, Revised and Corrected. London: Bell and Daldy. 1872.

ALTHOUGH this beautifully got-up book is not without a certain amount of what is termed "padding," it is decidedly an interesting and useful work. It contains every detail connected with a gentleman's garden and gardening. The illustrations are very effective; and the book is both pleasant to look at and to read. It abounds in information on a variety of points which the lover of a good garden finds it necessary to know, but for which he does not know where to turn. The author, as those who have the pleasure of his acquaintance will acknowledge, is entitled to speak with some authority on a subject which has given him so many hours' pleasant occupation, and been a source of no little enjoyment to his friends.

Foreign Gleanings.

ANATOMY AND PHYSIOLOGY AT WIESBADEN.

IN the section of Anatomy and Physiology of the late meeting of *savans* at Wiesbaden, several papers of interest were read. Amongst these were:—

1. *On the Structure of the Eye of the Lamprey.* By Dr. Langerhans. In this animal the globe of the eye is peculiar in being destitute of a sclerotic coat, and the choroid is directly continuous with the membrana Descemetii. In ammocœtes the latter membrane is very largely developed, and completely fills the anterior chamber. The iris appears to be simply a continuation of the retina, which is itself attached to the choroid by a thin layer of connective tissue. He finds, in accordance with Max Schultze's observations, that there are several layers in the retina. The external granule layer is followed by the ganglionic layer, in which a double row of large ganglion cells are separated by a fibrous layer; internally to the ganglion layer succeed in order the internal granule layer, the optic fibre layer, the granular layer, and the limitans interna. Processes are given off from the external ganglion layer which penetrate the lamina granulosa externa. The granules of the rods and cones enlarge to form cup-like bodies, which are likewise in connexion with the granulosa externa, and these cups resemble hoods (Hauben) on the processes of the ganglion cells. It is thus rendered highly probable that a direct connexion is established, on the one hand, between the connective tissue cups and membranes of the granules with the connective tissue of the granulosa externa; and on the other, between the nervous contents of the ganglion cells with the processes.

2. *On the Influence of various degrees of Temperature on the Iris of Mammals and upon the Striated Muscular Tissue of the Frog.* By Professor Grünhagen. The author showed that certain temperatures between 32° F. and blood-heat exert a considerable influence on the size of the pupils in mammals after extirpation. Thus in the cat, if the eye were exposed to a temperature of 100° after extirpation, the pupils remained widely dilated; whilst, if the temperature were lowered to about 60°, they underwent strong contraction; dilating again to a remarkable extent if the temperature were lowered to 32°. Prof. Grünhagen believes that this is not a matter of contraction and dilatation of the sphincter pupillæ, as Brown-Séquard and H. Müller are disposed to believe, but that the phenomena are due to the varying capacity of the tissue of the iris for the imbibition of water at different temperatures. He holds that the tone of the iridal tissue is lost immediately after death by the absorption of water; whilst when it is exposed to great cold, water is again expelled from its interstices. That water is really given off in the latter case is rendered probable by the reaction of the lens to cold, for this body becomes cataractous at a freezing temperature, owing to the formation of vacuolæ in its substance. The impaired irritability of the muscular tissue of the iris can be restored even after the lapse of two days by placing the iris in a chamber at blood heat. M. Grünhagen showed further that on cooling down the muscular tissue of the frog to the freezing point, its irritability upon the application of a mechanical stimulus was greatly increased. By this means it is possible to demonstrate muscular contraction without the participation of the nerves. The contraction so produced is capable of producing secondary contractions.

3. *On the Action of certain Bitter Substances upon the Circulation and upon the Blood-pressure.* Dr. Kohler, of Halle, gave details of experiments he had undertaken with a view to determine the physiological action of bitter substances upon the circulation and blood-pressure. He found that when cetrarin, columbin, and some other bitter substances were injected into the veins, a diminution of the blood-pressure to the extent of from eight to twenty millimetres of mercury was first observable in the arteries, which was followed by an increase to the extent of twelve to eighteen millimetres above the original tension. The cause of the diminution of pressure, which occurred even after section of the spinal cord and of the pneumogastric nerve, is to be sought in the heart itself; whilst the cause of the augmentation, which did not take place after section of the spinal cord, must be looked for *outside* the heart. The augmentation of the blood-pressure, he thinks, is attributable in the case of cetrarin and of columbin to the excitation of the vaso-motor centre. The primary diminution probably results from paralysis of the termination of the vagus in the heart. The frequency of the pulse, even when poisonous doses of the above-mentioned bitter substances had been given, remained unchanged up to a short period before death.

4. *On the Migration of White Corpuscles.* Dr. Thoma read a paper on the migration of white corpuscles into the lymphatics of the tongue of the frog. He injected the lymphatics of the living animal with an extremely dilute solution, not containing more than from 1-2000th to 1-8000th part of nitrate of silver, and found that, with certain precautions, this did not lead to stasis of the blood in the blood-vessels, but only to a lively exodus of the white corpuscles from their interior. After the lapse of some time, when the parts had begun to recover from the injurious effects of the injection, he was able to observe the re-entrance of the corpuscles into the lymphatic vessels through certain stomata in their walls, now marked and rendered distinct by a precipitate of the silver salt. In a second series of researches the lymphatics were injected with a dilute emulsion of cinnabar in a three-quarter per cent. solution of common salt. The cinnabar was in part deposited in the stomata of the lymphatics, and partly passed through them, and was deposited in the tissues in the form of small, round, cloudy patches. The evidence of the identity of the stomata brought into view by means of cinnabar, with those rendered apparent by means of nitrate of silver is obtained by observing their peculiar grouping, and by the subsequent injection of nitrate of silver into the same vessels. The injection of cinnabar causes very little disturbance of the circulation. If a lively exodus of the white corpuscles from the bloodvessels be produced by making an abrasion of the surface, the migrating cells quickly make their appearance in the stomata of the lymphatics marked out by the cinnabar. They then take up the particles of cinnabar into their interior, which causes them to lose their activity, and accumulate in the stomata. They then appear in the form of cauliflower excrescences projecting into the interior of the lymphatics, which gradually break up into their constituent cinnabar-holding cells. These may be traced into the larger vessels, and from thence into the blood. In these researches a remarkable regularity or uniformity in the track pursued by the white corpuscles was observed. They pass away from the bloodvessels nearly at right angles into the tissues, their course, however, being in a series of short zigzags. They all appear to travel at about the same pace.

IODIDE OF MERCURY IN PULMONARY PHTHISIS.

Dr. Brachatti, of Larnaca, prescribes the above salt, combined with oxymel of squills, in the various stages of phthisis. The usual dose is one-sixth of a grain for an adult; for children he uses it in the shape of pills; one-fourth of a grain is divided into eight pills, and one or several pills are administered according to age.—*Gazetta Medica delle Provincie Venete.*

THE LANCET.

LONDON: SATURDAY, OCTOBER 25, 1873.

THERE is one conspicuous and very serious defect in the present General Medical Council which in the interest of medical education ought to be corrected. It cannot be said that the Council includes in its membership one surgeon of eminence and authority. It contains physicians of the highest position and reputation—for example, Sir WILLIAM GULL, Sir ROBERT CHRISTISON, Dr. STOKES. But we look in vain for any name of equal moment in surgery. Even the gentlemen who represent the surgical corporations proper could not be taken as exponents of the present state of surgical knowledge or authority as to the best methods of teaching surgery. Some of them are exceedingly useful members of the General Medical Council, but not on the score of being either great surgeons or great surgical teachers. A very cursory glance at the names of the members of the Council brings out remarkably the preponderance of medical lights. It may be that this is partly the explanation of the charge lately made in one of the best of the introductory addresses, that surgery is incompletely taught in the course of ordinary medical education. We would not give prominence to this defect in the Council if it were not for the fact that an occasion offers for removing it. Four of the Crown nominees of the Council have to be immediately appointed. The present nominees are Drs. SHARPEY, PARKES, R. QUAIN, GULL, CHRISTISON, and STOKES. No critic could find other fault with such names than that they recognise in no distinctive way the importance of surgical knowledge. We admit, too, the fact that there is not one of them that we should like to miss in the roll of the Council. But still we are entitled to ask the Government upon what principle it ignores surgery in its nominations?

It is not necessary to deny the importance of medicine or the medical half of practice. This is conceded on all hands. Moreover, attention to the medical half of education is ensured by the large preponderance of bodies that are likely, if not certain, to return physicians as distinguished from surgeons. As a matter of fact, at least nineteen out of the twenty-four men who constitute the Medical Council represent those that are medical rather than surgical, and the representatives themselves, with perhaps a single exception, are men of distinction in physic or in physiology and not in surgery. We do trust under these circumstances that the Government in its new nominations will give conspicuous recognition of the claims of surgery. Great surgeons were never more plentiful than they are just now, and they were never less open to the charge of knowing nothing but surgery. They have reason to complain of having been hitherto overlooked. But they are an uncomplaining class. We complain for them, and in the interest of surgery as a great branch of medical practice. If rumour is at all to be credited, one very distinguished medical Baronet representing the Crown will decline reappointment. If this should be so, an easy place will be found for one eminent surgeon, whom there will be no difficulty in finding, in the same division of the country. Men of every branch of the profession in Ireland and out of it will expect the reappointment of Dr. STOKES as unmistakably the man most representative of all that is meritorious in Irish medicine. Other reappointments are equally called for by the common consent of the profession; but we are sure that we have the approval of the whole profession in again urging upon the Government the desirableness of making the Council representative of every branch of practice and of medical knowledge, and of nominating more equally physicians and surgeons of equal fame.

IN a recent article on the Germ Theory we pointed out the great discrepancy which exists between the views of Professor SANDERSON and those of Professor LISTER: the former maintaining that the contamination of putrefactive fluids with germs of Bacteria is not brought about through the atmosphere; whilst the latter, following PASTEUR, has always held that contact with atmospheric germs is the principal provocative of putrefactive changes. At the commencement of the communication to which we have already referred (*Nature*, July 10th and 17th), Professor LISTER states that his object in undertaking the investigations therein recorded had been to submit Dr. SANDERSON'S conclusions to a searching experimental test; though towards the close of his paper he tells us that his principal object had been "to throw light upon the nature and habits of the fermenting organisms." In truth, in his paper there is a very puzzling and somewhat confused admixture of evidence bearing on these two subjects; whilst, in addition, Professor LISTER relates other facts which, as he thinks, tend to disprove the views of those who believe in "spontaneous generation." It is much to be regretted that his evidence is not more systematically arranged, so that the strength or weakness of his views on each of these subjects might be more clearly perceived by those who wish to gain information on these questions. Many interesting facts with regard to the variability of organisms in different media are recorded. Some of these are new, though others are of a kind which have been long known—especially through the observations of M. TRÉCUL, with which Professor LISTER does not seem to be familiar. Although several of his conclusions on this subject seem open to criticism, we do not propose to dwell upon them here, more especially as there is a comparative unanimity of opinion amongst leading observers upon this part of the subject—viz., as to the extreme variability of the lower organisms in different media. We must therefore cull and place side by side the evidence which Professor LISTER brings forward upon the other two subjects—(1) upon the question of aerial contamination of putrefactive fluids, and (2) upon the question of spontaneous generation.

Taking first the question of aerial contamination by putrefactive germs, we find that the evidence actually adduced in its support is by no means so strong as might have been expected. The only facts related are these: Whilst urine received into previously heated vessels could be kept free from "organic development or putrefactive

change for months" by merely covering the vessel containing it with a porcelain dish and a bell jar; on the other hand, Professor LISTER found that after such samples of urine had been exposed to the air various kinds of organisms soon appeared in it, and among the rest, in several instances, Bacteria. Again, it is related that a boiled fluid, which had previously remained pure for some time, so long as it was sheltered from atmospheric particles, produced Bacteria very quickly after it had been exposed for one hour in the air of a sitting-room. This is the only evidence now adduced by Professor LISTER which really tells in favour of the view that putrefactive fluids are often contaminated by atmospheric particles. Although so far as it goes the evidence is good, and although it would have been easy for him to have adduced much stronger evidence upon this subject, it seems necessary to remind Professor LISTER that evidence of this kind does not speak either for or against his particular theory of fermentation, since it is equally explicable by those who believe in the chemico-physical theory and in "spontaneous generation." Professor LISTER must resort to other methods if he wishes to attempt to disprove Dr. BASTIAN'S position, that the mere dead organic particles which the atmosphere contains act as ferments in such cases.

Other evidence which Professor LISTER now brings forward in support of his main position—that contamination of putrefactive fluids takes place by means of aerial "germs,"—we have not referred to, because we do not consider that it entitles him to draw any such conclusion. By the use of antiseptic means he endeavours to obtain milk, uncontaminated, direct from the cow into certain previously heated vessels, which were subsequently protected in much the same way as had been shown to be efficacious for the preservation of urine. Milk was collected in eleven vessels treated in this manner, and within a few days organisms had made their appearance in all but one. No statement is made that, in this exceptional case, the milk was submitted to microscopical examination; but it is obvious that no mere naked-eye examination was sufficient to enable Professor LISTER to pronounce upon the absence of organisms, more especially in the face of what he says concerning the varied nature of the changes in the other specimens. Whilst, in the presence of the facts adduced by those who believe in spontaneous generation, his supposition that the change had been induced in the eleven vessels (containing such a fluid as unboiled milk) by aerial germs, was, to say the least, an unwarranted assumption. The changes might not have been caused by aerial particles at all; and even if he could have shown that they were so caused, the further question as to whether the fermenting particles were living or dead would still have remained for solution. Professor LISTER thought it necessary to repeat this experiment, taking extra precautions against the entry of aerial particles by adopting a process of filtration; and, strangely enough, he thought it necessary to boil the milk for *one hour* in addition. This mode of employing the experimental "method of difference" of course changed the whole character of the experiment. We now, in fact, had to do with a series of vessels containing boiled milk exposed to filtered air after the fashion adopted by SCHRÖDER and DUSCH; and the question to be decided, therefore, was no longer the simple one with which Professor LISTER started—viz., whether without the aid of atmospheric particles specimens of unboiled milk would undergo putrefactive changes. And because in these latter experiments of Professor LISTER organisms did not develop in the milk which had been boiled for one hour, he was certainly mistaken in saying, as he does, that this is strong evidence against the theory of spontaneous generation. M. PASTEUR and others have fully satisfied themselves that milk boiled for a shorter period, and afterward kept under similar conditions, will yield Bacteria in abundance. Obviously, therefore, in explanation of his own results, Professor LISTER might at least have made further inquiry as to the necessity of such prolonged ebullition for merely destroying germs of Bacteria, or he might have inquired into the quality of his milk, before he ventured to draw any such conclusion in the face of the contrary experimental results obtained by M. PASTEUR and others. Similar arguments apply to his experiments with turnip infusion, seeing that we have now the testimony of Dr. SANDERSON and Professor HINZINGA in support of Dr. BASTIAN'S statements that a properly prepared turnip infusion will undergo putrefaction, after ebullition, in closed vessels, and entirely without the aid of atmospheric particles of any kind.

Such is the substance of the evidence which Professor LISTER now brings forward in the published abstract of his communication in support of the theory upon which he bases his antiseptic system of treatment. All that is clear and positive, concerning the two divisions of his subject with which we are now concerned, are a few facts in support of his position that contamination of putrefactive fluids does often take place by means of aerial particles. As we have before stated, Professor LISTER might easily have strengthened very materially this portion of his theory. None of the evidence, however, now adduced at all entitles him to come to the conclusion that the aerial particles which are effective in such cases are not, in many instances, mere dead organic fragments rather than living germs of pre-existing organisms. As we have before pointed out, this is the question upon which Dr. BASTIAN and himself hold widely different opinions, though it is difficult to see, from the facts which he has brought forward, why Professor LISTER should have thought himself entitled to come to any definite opinion upon this part of his theory.

This latter aspect of the question has been made the special subject of recent investigations by Dr. BASTIAN (Proceedings of the Royal Society, 1873, Nos. 143, 145). He naturally starts with an inquiry as to the temperature which suffices to kill the lower organisms and their germs in various fluids, and after a long series of investigations comes to the conclusion that this is always at or below 60° C. (140° F.) This being true, Dr. BASTIAN maintains that in the now admitted cases in which previously boiled fluids have undergone fermentation in sealed flasks, so as to swarm with Bacteria, some of such organisms must have appeared *de novo*. He claims to have proved that fermentable fluids generally may be divided into three principal classes—viz.: (1) those least prone to undergo change, which will only ferment or putrefy under the influence of living germs; (2) those which will ferment or putrefy not only under the influence of living germs, but under the influence of mere dead organic matter; and

(8) those which will ferment or putrefy not only under the influence of living or not-living ferments purposely or accidentally added to them, but by virtue of "spontaneous" chemical changes taking place in the fluid itself, during the progress of which living organisms are abundantly engendered.

Professor LISTER's observations are by no means incompatible with these views, and until he or others endeavour more directly to meet the question at issue, there is no certainty that he may not be compelled to change the theoretical basis of his system of treatment. It has been definitely established by Dr. BASTIAN, and his results have been confirmed by others, that living organisms will appear in closed flasks containing boiled fluids. It is of no avail, therefore, for other experimenters to multiply instances of their own non-success in obtaining similar results. Unless they can show that Bacteria are not killed by being heated to 212° F., we do not see our way clear to refuse assent to the validity of Dr. BASTIAN's conclusions.

YEAR by year the question of Medical Education forces itself with greater urgency into the professional foreground. It is one which presents difficulties from which the cognate questions of legal or clerical education are happily free. The professions of the Church and the Bar differ from that of Medicine in one distinctive feature: their bases are fixed, while those of the other undergo perpetual change. The churchman has his confession of faith or his articles of religion to fall back upon. The pleader has mainly to appeal to established precedent. But the medical practitioner is incessantly reminded of the fact that the principles he applies hold good only so long as they are not disturbed by contemporary observation and research, which are ever lighting upon new facts, discrediting old ones, and affecting materially the inductions or generalisations which he puts in practice.

Such being the case, one would naturally infer that the preliminary culture of the medical student—in other words, the discipline of the mind, the strengthening of the judgment, the formed habits of study—would be as much more thorough than that of the future divine or the barrister as the subject-matter of his profession is more complex and less rigidly defined. The contrary is notoriously the fact. Long before the latter two have done with that training which must precede professional work—long before they have abandoned what BACON calls "that main and common way before the sciences do part and divide themselves,"—the medical student leaves them at the close of the grammar-school curriculum, and three or four years before their preliminary culture has ceased is plunged, with half the preparation, into the thick of professional study twice as difficult. We know the result. In proportion as his standard of proficiency is high, the duly qualified practitioner soon begins to feel the want of a more liberal culture, and is often heard to say—"Had I had the ordering of my studies, I should have given my mind the benefit of that preliminary training by which my friends of the sister professions have so richly profited."

With these facts before them, however, some of our medical educators would shorten still further the already meagre preparatory diet of the student, and launch him on scientific exercise before his mental height and weight had touched the standard of his compeers of other professions. Professor HUXLEY is one of the most persistent of these counsellors. He would exclude botany and zoology from the professional curriculum in order to squeeze them into the overcrowded preliminary course. To make room for them he would practically exclude Greek from the medical man's education, and curtail disastrously the time during which alone he can acquire even the elements of those mathematics which are becoming more and more essential to the physiologist. In a series of motions submitted to the Court of Aberdeen University (whose Lord Rector he is) he embodies these propositions, and would fain introduce into the northern university the innovations recently made law in the metropolitan. We hope at the next meeting of the Court his views will have full justice done to them. Sooner than expunge Greek or the higher mathematics from the medical student's education—sooner than make the comparatively feminine studies of botany and elementary zoology do duty for those two instruments of mental training, we should be prepared for the suggestion that the purely professional education be postponed till a maturer age—till a time, in fact, when the student shall have made the philological and mathematical acquisitions common to other professional aspirants of his standing, and shall not only possess a working knowledge of Greek and analysis, but shall have gone through the salutary discipline of MILL's Logic, ARISTOTLE's Ethics, and WHATELY's Rhetoric.

It is not difficult to foresee the benefits of such a course, though we are not so sanguine as to expect its realisation. From students so trained would spring a race of teachers and lecturers who would avoid the defects we have more than once indicated in the tutorial working of our schools, and who would perform the *rôle*—that of economising the pupil's attention—so ably advocated by Dr. P. W. LATHAM in his recent letter. That accomplished physician takes a more liberal estimate of what has been termed "the complete professional mind" than Professor HUXLEY. Quite as practical in his requirements, he views in a more generous spirit the functions of the practitioner—a spirit which is still, we are glad to see, alive in some, at least, of our professional schools, and which found cogent expression at the inauguration of the new Owens College at Manchester the other day. It was indeed most gratifying to see the unanimity with which medical and non-medical teachers alike insisted upon the necessity of our not only retaining what preliminary culture was still required, but of raising it to something like the standard so beneficially exacted in the German gymnasia. Till then, as Professor GAMGEE justly remarked, our scientific investigators will be inferior to their Teutonic kinsmen, and will continue to be the disciples of men to whom under more favourable auspices they might act as leaders.

THE friends of charity and the promoters of the Metropolitan Hospital Sunday may be congratulated on the public meeting called to organise the executive for the collection of 1874, and held in the Egyptian Hall on Wednesday. The

meeting was numerous and influential. The difficulties which presented themselves last year in the way of a contemporaneous collection were neither felt nor expressed. The Bishop of LONDON represented the Church of England in a speech which did credit to his frankness and his sense of the value of benevolence as one of the Christian graces. All the other denominations, Christian and Jewish, were also ably and amply represented, and the general sentiment of the meeting was one of satisfaction at what had been done, coupled with a determination to do better in the next year. There was no want of candour on the part of those who thought that the sum raised in 1873 did not quite come up to what might have been expected. One gentleman said it had been estimated that the sum raised by collections previous to the establishment of the Hospital Sunday had amounted to £4000 a year, and that £40,000 had been expected as a first general collection. It must be admitted that the estimate of £40,000 was a sanguine one for a first collection, taken at a comparatively short notice. It is to us quite satisfactory that in the first year of Hospital Sunday seven times the sum raised by local collections in the time prior to its establishment should have been realised.

The one "rock ahead," as Canon MILLER justly called it, of the movement, is the question of Dispensaries; and not the least satisfactory feature of the meeting of Wednesday is that a resolution was unanimously agreed to which seems to afford a chance of the settlement of this question in a way that will entirely harmonise the promoters of Hospital Sunday. The resolution proposed by Canon MILLER is as follows:—

"That, in accordance with the wish contained in the Report of the Committee of Distribution, to the effect that some expression of opinion should be given as to the relative claims of hospitals and dispensaries upon the sympathies of the public, a committee be formed to consider and confer with the Council; the committee to contain representatives of both classes of institutions, whether members of the Council or otherwise."

Doubtless the friends of dispensaries would have preferred a direct assurance from the meeting that dispensaries should be dealt with differently next year as compared with this; but the claims of dispensaries were so fully set forth by various speakers, and the sympathy of the meeting was so evidently in favour of these institutions, that there can be little doubt that the result of Canon MILLER'S motion will be a more generous treatment of dispensaries. Dr. CRIPPS put the matter forcibly by pointing out that there were only about 4000 beds in the general hospitals of London available for "the severe and serious" cases referred to in the Report of the Distribution Committee, leaving the great mass of serious diseases of the poor, not actual paupers, to be grappled with by dispensaries. He mentioned the case of two dispensaries in his neighbourhood, in which about 20,000 visits to patients at their own homes are paid annually, arguing from this that dispensaries have a function in regard to severe disease as important in its way as that of hospitals. Dr. GLOVER, in seconding Canon MILLER'S resolution, argued that for one family disabled or distressed by diseases that were properly treated in a hospital, twenty families were disabled or distressed by diseases that could be dealt with by a dispensary. He warmly corrected the statement made in the Report of the Distribution Committee, that the medical staffs of dispensaries were paid. Referring to provident dispensaries, he expressed his great interest in all sound experiments of the sort, but said that many such dispensaries were only private ventures, not conducted in a very creditable way, and that in London there must always be a large class who could not pay regularly on the provident principle, and whom it was really kind and charitable to assist, thus keeping them from becoming paupers. Moreover, he urged that the adoption of the Provident principle should be left to the judgment of the committee of individual dispensaries.

Another resolution of interest to the profession, and likely to increase the efficiency of the Committee of Distribution, was adopted on the suggestion of Dr. SEDGWICK SAUNDERS—viz., that there be added to the Committee of Distribution at least one medical man not directly connected with any metropolitan hospital. Last year it was thought that such a member might bias others and be biased himself in favour of a particular hospital. This year such a notion was rejected as neither very tenable in itself nor very complimentary to the profession. Mr. BRUDENELL CARTER pointed out that the effect of the resolution in its first shape would exclude the men of highest standing in the profession, who were all connected with hospitals, and the resolution was altered so as only to exclude those directly concerned in the management of hospitals. We regard even this qualification as superfluous; but the resolution as it stands is a great improvement upon last year. Had there been a medical man, or still better, two, in the Distribution Committee, it is probable that its report, and the work of distribution, would have been much less open to criticism than they have proved to be. Regarded as a whole, the meeting of Wednesday promises to continue worthily the development of what we may now call this great metropolitan institution,—the Hospital Sunday.

OUR recent Report on the Sanitary Condition of Wolverhampton appears to have been taken in ill part by some members of the Town Council. At the last meeting of this body extracts from our report were read, and some fiery speeches made in regard to them. We were accused of "maligning and misrepresenting the town"; of "spasmodic newsmongering"; of perpetrating a "gross libel" on the Sanitary Committee; of writing "in a spirit of pique"; and, above all, of "blackening the town": the last certainly a work of supererogation, as the town was quite black enough before. We need not discuss these reckless and absurd charges, and can only hope, for the credit of the town, that they are not generally entertained. No attempt was made to answer any of our statements, and the accuracy of our report is illustrated by almost every word in the published account of the meeting. Only two tangible objections were made, and these we may as well dispose of at once. Councillor BARKER alleged that we had been guilty of exaggeration in speaking of an "epidemic" of typhoid. It is sufficient, in regard to this charge, to quote the following words from the report of the medical officer of health, which is printed in the previous column of the *Wolverhampton*

Chronicle: "The disease did not assume the epidemic form until propagated by the contaminated milk, forty-two persons who partook of the same being affected." Councillor LEE made another point of equal brilliancy. Alluding to our remarks on the courts of Stafford-street, which he himself described as "foul slums," he is reported to have made the following observation: "How the filth of Stafford-street, even supposing it was as bad as represented, could cause an outbreak of fever on the very opposite side of the town, he could not clearly understand." It is almost unnecessary to remark on this that we did not ascribe the fever of Brook-street and its vicinity to the middens of Stafford-street. Brook-street itself is foul enough to account for any quantity of fever. This we distinctly stated, and our observations are confirmed by the medical officer and by a sub-committee of the Town Council, which has just reported that in this district there are sixteen privies in direct communication with the sewer, not to speak of other abominations. To the gentleman who suggested that our Commissioner would have been better employed in delivering "a series of lectures on sanitary reform, and as to the best means of abating disease and preserving the public health," we need only reply that lecturing does not exactly fall within the province of a medical journal.

On the whole it is abundantly evident that the public health of Wolverhampton is not in a satisfactory state. The medical officer reports that the average death-rate during the last quarter has been 29 per 1000, rising in one week to 38. This is very high even for a manufacturing town, and would alone be sufficient to show that the sanitary arrangements of the town required a thorough reform. Taken in conjunction with the results of our house-to-house inspection, it fully warrants the opinion we have expressed that grave blame attaches to the authorities of the town. That they have of late years effected great improvements we freely admit, and we admit also the difficulties which lie in the way of sanitary reform in poor districts; but repeated experience has shown that these difficulties can be conquered, and no excuse can be accepted for a rich town which still permits the sacrifice of hundreds of valuable lives every year to the demons of filth and neglect.

If the Town Councillors of Wolverhampton wish to preserve the esteem of the educated portion of their fellow-townsmen and the respect of their country, they must cease to comfort themselves with the thought that other towns are worse than their own, and must resolve that, whatever be the cost, the foul ash-pits and wells shall be rooted out from their courts and lanes, and that their sanitary supervision shall for the future be a reality and not a sham.

The resolution which debarred their officers from affording assistance to a scientific journal, inquiring into an important sanitary question in the interest of the medical profession and the public, was a most unwise one. An attempt to burke independent inquiry seldom succeeds, and is itself sufficient to provoke suspicion. Concealment is a pretty good sign that there is something to conceal; and though we think that, in the present instance, our inquiry succeeded better than it would have done under the auspices of the Town Council, the fact does not affect our opinion of the wisdom of the proceeding.

WE have, during the past summer and autumn, endeavoured to furnish our readers with brief notes of the progress of cholera in Europe; and specially with reference to its appearance in towns on the sea-board, because its continuance in any seaport, either north or south, must necessarily and continuously imperil our own position as possible recipients of the epidemic by waterway. There is little doubt that the disease existed to a greater or less extent in and around Hungary during the winter, for records were furnished in January as to its presence in Gallicia, Lemberg, and the surrounding districts. But the first decided outbreak that attracted notice occurred at Widdin, on the Danube, in the middle of June. This town has direct communication by steamboat with Hungary and the Upper Danube, and of course with Vienna, and so it travelled to the latter city and to Buda and Pesth. In June, it had, besides extending down the Danube to Rustchuk, Silistria, Galatz, and Ibrail, found its way into West Prussia, and down the Vistula from Poland and Gallicia to Dantzic and Neufahrwassen, where, up to the 21st of the month, of 42 raftsmen attacked, 25 had died. In July we drew special attention to the danger of importation from the Baltic ports, and at this time special instructions were sent from Whitehall to all the eastern and north-eastern ports in England, which resulted in the establishment of a system of inspection of vessels by the various riparian sanitary authorities. On the 28th July a party of Danish and Swedish emigrants arrived in London from the Baltic, and although they brought cholera with them, the disease was undoubtedly nipped in the bud by the energetic action of Dr. BUCHANAN, acting in concert with the Port sanitary authority. In August we find the disease still clinging to Vienna and Pesth, and it had appeared also at Venice, Dresden, Trieste, Parma, and Genoa. In Vienna, on the 14th and 15th of this month, 46 cases and 33 deaths are recorded. It had extended to nearly every town in the lower Danube, had visited Odessa, as well as Varna and other places on the Black Sea. And as to the basin of the Baltic, every chief town situated at the mouth of a river, and many towns on the banks of these streams upwards, were attacked. In September it raged with great severity at Naples as well as at Genoa, the French frontier was crossed, and cases were reported almost simultaneously at Havre, Caen, Rouen, and Paris. On the 20th of the same month a small schooner arrived in the Thames from Caen, with a fatal case on board, but the vessel was stopped at Gravesend by the Customs and port authorities. On the 29th a vessel arrived at Liverpool from Havre with some of her crew dying from the disease,—all pointing to the way by which the epidemic is likely to get into this country. At the close of last month we were enabled to report that the epidemic was decreasing in Paris, the deaths between the 12th and 19th having been 125 in number, including the town and hospitals. Since the commencement of the current month, the official or semi-official list of infected and suspected ports published weekly in the *Shipping Gazette* and elsewhere has lessened in length considerably. It is said that the disease has reappeared at Dantzic; and we know on good authority that it has very recently attacked Bergen—a large fishing town on the West Coast of Norway.

But it is sensibly diminishing in Vienna (having proved fatal in no less than 1230 cases); and we hope next week to be enabled to inform our readers authoritatively that Havre and the riparian districts of the Seine are free. We propose next week to summarise, as far as is possible, what has been done this year by official and other exertions in way of preventing the importation of the disease, and how far these exertions have proved successful or satisfactory.

Medical Annotations.

"Ne quid nimis."

A NEW FIELD FOR HOSPITAL PRACTICE.

MUCH dissatisfaction has been expressed by the authorities of the metropolitan dispensaries at the distribution of the funds collected on Hospital Sunday. They argue, and with some show of reason, that their efforts are greatly misappreciated, and that in some respects they perform a good work in no degree inferior to that accomplished at the hospitals. There is no doubt that the question of the management and administration of dispensaries is one that demands a closer attention than it has hitherto received. Large numbers of the respectable poor of London attend the dispensaries in preference to the hospitals, because in their illnesses they dislike being taken from their friends and homes, or object to waiting so many hours in the out-patients' rooms of the hospitals before they can be seen. Further, it is often impracticable to admit, as in-patients, persons who are nevertheless too ill to attend in all kinds of weather as out-patients of the hospitals.

It therefore becomes a matter for the serious consideration of the lay and medical managers of the general hospitals, especially those to which medical schools are attached, whether they shall not adopt an out-door administration of medical relief similar to that which obtains at the dispensaries. This could be easily effected, and a large amount of medical aid bestowed on deserving persons at a small pecuniary cost; the patients being seen at their homes, and the medicines dispensed at the hospitals. By this means many patients would receive the benefits of the professional skill of the medical staff of the hospitals, while they enjoyed the comfort and consolation of being at home.

From another point of view, such an innovation as we have suggested appears very desirable. Medical men who have received their professional education solely at hospitals must, when engaged in actual practice, have met with many diseases which, although very common, are rarely if ever seen at clinical departments of the medical schools. They are consequently devoid of a practical knowledge of those minor ailments which make up a large part of general practice. If, however, there were at the medical schools such an administration as we refer to, the student, under the supervision of his qualified seniors and the medical staff, would be able to study and treat those very diseases under conditions similar to those met with in general practice. He would, moreover, under proper guidance, acquire a ready and exact method of diagnosis and a prompt manner of applying remedies, and learn many of the technicalities of general practice, without a knowledge of which he must experience numerous repulses and hindrances when he has to enter in earnest upon the practice of medicine. It is, for instance, somewhat humiliating to find that the old nurse has accurately diagnosed a case of measles which puzzled the "new doctor," and it may even be a considerable detriment to his reputation and retard his progress for many years. Such little illnesses as these, which are not serious enough to be admitted, but too serious to be brought to the hospitals as out-patients, are what the student will be most likely to meet with in this out-door relief, and which in general practice will be found to affect very considerably the comfort and happiness of families. This modification will entail many changes in the *personnel* of the hospital and the creation of several fresh clinical appointments, but the actual working arrangements would depend greatly upon the situation of the hospital and the number of its medical students. It is, however, very desirable that such means of medical charity should not be abused, and should in no way interfere with the duties of the parochial practitioner or the interests of those medical men who practise among the poorer classes who are able to pay but small fees. But, inasmuch as an opportunity would be afforded of observing the social condition of patients by seeing them at their own homes, it seems that the dangers of abuse of this mode of charity are less than in almost any other. We propose at some future time to return to this subject, and suggest some further details of action.

A DOCTORS' WAR.

FOR more than half a century our Colonial Office has had this Ashantee question cropping up every now and then. Governor Pine wanted, more than ten years ago, to have a small European force with which he might march on Coomassie, and he expressed his conviction that the dangers to health of such an expedition had been exaggerated. Be this as it may, Lord Derby happily characterised the Gold Coast expedition as a doctors' and engineers' war. The climate is notoriously malarious, although it is very questionable how far its unhealthy character extends beyond the maritime district. In the bush, and in the vicinity of the rivers, especially in that of the Prah, the ground is low and swampy, and the roads simply soft, slippery tracks. There are several routes by which Sir Garnet Wolseley might march on Coomassie. That from Cape Coast Castle is the most direct, but it is the most unhealthy, owing to the extent of bush which will have to be traversed before the more open, elevated, and healthy regions are reached. It is quite possible that Accra might be taken as the starting point. This line of march to Coomassie would be more indirect and difficult than the former; but it offers the great advantage that the distance to be traversed through the bush is much less, the locality is more healthy, and the highlands are sooner reached. Moreover, animal transport is available. The distance of Coomassie from Accra is about 250 miles, and the road very hilly. Abude is believed to be healthy, and, according to Stanford's map, it is somewhat over fifteen miles from Accra. Aquapim is a clear, mountainous country, and there is a perfectly healthy missionary station at Ackropong, which is some thirty miles from Accra.

We may sum up the results of our information by saying that there is a "skirting" of malarious country to be got over, the extent of which varies at different places, but that, this once passed, the chief sanitary obstacles of the campaign are overcome. It is the doctors who will have to provide all the safeguards in their power against the effects of malaria, and it rests with the engineers to devise means for rapidly transporting the troops through the unhealthy district, whatever its extent may be. The doctors, as we understand, make a great point of having the expedition limited to the healthy season, and of having all the necessary preparations made before the arrival of the troops, so that they are not detained in the maritime districts, but pushed steadily onwards towards Coomassie. Of one thing

there can be little doubt—viz., that never before has a greater amount of medical consideration been given to secure the best methods of averting sickness; and we have no experience whatever of a campaign having been undertaken in this climate under the same, or even similar conditions to those proposed. Of course we would guard ourselves against expressing any opinion whatever as to the wisdom or not of the policy of the expedition, this being an aspect of the subject for the consideration of our political contemporaries.

THE ADULTERATION OF MUSTARD.

THERE is no abuse, however great or manifest, which does not find its defenders. This is notably so in the case of the adulteration of articles of food, the last example of the kind being furnished by Alfred Newton, who comes forward in *The Times* to defend the time-honoured custom of adding wheat-flour to mustard. Of course we are told that this is done for the special advantage of the public, that pure mustard is unpalatable without this addition, that it is coarse and gritty, that it won't keep, and that it is even injurious to health. Mr. Newton thus expresses himself in the letter in question:—"Brown mustard-seed, the flour of which enters largely into the composition of the condiment we call mustard, contains an acrid, pungent, volatile oil, noxious to the taste, and, unless neutralised in some way, injurious to health." Now the answer to all these statements is, that this volatile oil is the very essence of the mustard; that without it the article would be of little or no value; that genuine mustard consists of the mixture of the farina of both black and white mustard-seed; that the latter is destitute of this volatile oil; that if a diluent is really required it is more appropriately found in the farina of the white mustard-seed than in the introduction of a wholly foreign substance, destitute of condimentary properties; lastly, that wheat-flour exercises no chemical effects whatever on the neutralisation of the volatile oil. But we will now inform Mr. Newton what wheat-flour really does when added to mustard. It substitutes for a valuable mustard a very cheap and comparatively worthless and inert substance; and it renders necessary, to restore the colour of the diluted article, the addition of turmeric and also of capsicum or pod-pepper to make up for the impaired strength and pungency of the attenuated mixture.

It should now be clearly understood that the Adulteration Act does not prohibit the sale of mustard if not injurious to health, provided the packets are labeled as such and the purchaser is distinctly informed of the fact; so that if the public choose to follow Mr. Newton's bad advice, and to consume the mixed article, they can do so without let or hindrance. Mr. Newton complains that the Act in question is unjust, and goes too far. We hold the contrary opinion, and say it does not go far enough, and that mixed articles, such as many coffees, cocoas, and mustards, should not be allowed to be sold at all under the greatly abused names of coffee, cocoa, and mustard; and, further, we consider that the names and proportions of the several ingredients of which the mixtures are composed should be stated in all cases.

THE CASE OF STRYCHNINE-POISONING IN BELFAST.

A FORTNIGHT since we gave an abstract of an unfortunate accidental case of strychnine-poisoning which occurred recently in the hospital practice of Dr. W. A. McKeown, of Belfast, and which was the subject of an inquiry by the city coroner. Our endeavour was, as it always is in such cases, to lay an impartial recountal of the facts before our readers, to enable them to draw from such recountal any lesson for their future guidance which the facts may afford, and in doing so it is our invariable habit to withhold, when no end is served by publicity, the name of any practitioner who may have been subjected to the annoyance of any accident such as the one recounted.

It seems, however, from a communication which we have received from Dr. McKeown, that we failed to do full justice to that gentleman. He points out:—1. That the derangement of the vision was not slight, as we stated, but that his patient's vision was only $\frac{1}{15}$ as tested by Snellen's types. 2. That the patient's eye-sight being defective, he was not ordered to "drop" the medicine himself, but to get somebody who saw better than himself to drop it for him. 3. That there is no room for any doubt as to the exact quantity which the bottle originally contained, and that it was proved by actual experiment in court that thirty drops from the phial measured half a drachm.

The verdict of the jury was doubtless right, that "the overdose of strychnine was taken through some mistake on the part of the said Thomas Shaw," but Dr. McKeown must admit that it is not in evidence how the mistake arose, and it was in the honest endeavour to unravel what is still a riddle that we have unconsciously made the remarks of which Dr. McKeown complains.

Dr. McKeown says: "I don't see that it matters much whether a patient be ordered medicine for one week or for three weeks at a time. Poor people cannot pay apothecaries for large bottles every two or three days, and many doctors give medicine in a concentrated form to save expense. As everybody knows, it is a very common practice to give medicine in drops." All this is quite true, but we must nevertheless repeat that it is highly undesirable to give potent poisons in too concentrated a form.

ST. JOHN'S HOSPITAL.

As many of our readers were deeply interested in the discussion on special hospitals, and especially that carried on with the vice-chairman of St. John's Hospital for Diseases of the Skin, we propose to give this week a brief account of the conduct of the latter institution since we closed the formal correspondence. About the time that the last letter appeared we received a copy of the resolutions of the Committee, in which it was stated that the Executive Committee had requested the Building Fund Committee to undertake the management of the hospital. This, of course, necessitated the resignation of "the gentlemen who had held the positions of chairman, treasurers, and honorary secretary." By this union of the two committees it was hoped that the usefulness of the institution might be extended and improved. About the same time, also, a notice went the round of the lay papers to the effect that the committee of the hospital deemed it salutary to reprint five letters written by Captain Mercier to this journal. These letters were said to "most effectively refute the allegations made in THE LANCET." This would naturally convey to those of our readers who saw the three letters which we published the impression that we had kept back "the effective refutation"; but this is by no means true, and the assertion may be looked upon as a mere rhetorical hyperbole. Feeling that it was desirable that they should at least profess penitence, the committee "promised wonders in their change," by inserting a paragraph in the daily papers, saying that "the Charity Organisation Society had been requested to undertake the duty of periodically inspecting the affairs of the charity, in order that there may be a guarantee to the charitable that the funds collected are properly applied." This brought a disclaimer from the secretary of the Charity Organisation Society, in which he said that no such request had been made. This was followed by an explanation from

Captain Mercier, to the effect that although the Charity Organisation Society had not actually been asked to undertake the above-mentioned duties, yet it had been decided that the request should be made, and that the delay had arisen from the secretary of the hospital being away on a week's holiday. Eventually, it appears, the request was formally made, but the council felt that it was "undesirable that they should undertake the audit of accounts in the case of any public institution, and therefore declined to undertake the office which the committee had offered them." Thus is the Committee of St. John's Hospital left in the unenviable position of having to audit its own accounts and of furnishing of itself a guarantee to the charitable public that the funds are properly applied. We may congratulate the public and ourselves that if our efforts have not accomplished everything that was desirable, they have done some good by directing serious attention to this institution.

RAILWAY ACCIDENTS.

IT is difficult to understand the notions of economy entertained by railway directors when we find it to be necessary for their *employés* to petition for the limitation of their hours of work within a reasonable period. The huge and appalling accidents which now and again arise from inattention or neglect on the part of railway servants, as the result of mental or nervous strain from protracted duty, and the money loss in destruction of rolling stock and in damages for personal injury incurred in such casualties, would, one would suppose, make any question which affects the vigilance of railway officials a subject of prime consideration. A board of directors, watching over the interests of shareholders, ought not to wait for the initiative to be taken by their servants in a matter which, to say nothing of the safety of the travelling public, bears so intimately upon the commercial prosperity of a railway company. Yet this is an anomaly of not unfrequent occurrence. Across the Tweed, where we might well have looked for the exhibition of better thrift, a great mass meeting of railway servants has been lately held to consider the course to be pursued to get their hours of labour reduced to ten per day, which resulted in the drawing up of a petition to that effect, with the proviso that there should be no resumption of duty until after an interval of eight clear hours of rest. At the meeting one speaker stated that he knew of cases where drivers had not left their engines for twenty-four, and even for thirty-one, consecutive hours. Assuming the truth of this statement, and that the practice exists generally to any extent, the wonder is that so many railway travellers reach their destination with a whole skin. We hear without surprise of commercial enthusiasts sacrificing health and even life for the sake of gain, but here is an exhibition of a reckless disregard of both life and profit.

OUR SUPPLY OF SUBJECTS.

THERE appears but little reason to suppose that this winter session will find our metropolitan schools much better stocked with subjects than they have been of late years. The amended Anatomy Act has done something towards abating the evil of a scanty supply of subjects, by permitting their preservation during the summer months ready for the winter session; but at present the legislation on the point is inadequate to the occasion. Cannot the Inspector of Anatomy suggest some scheme to provide bodies in sufficient numbers for the thorough teaching of anatomy and operative surgery? If not, we fear that the course of operations on the dead subject required by the recent regulations of the College of Surgeons will prove a farce, and that the instruction will be reduced either to seeing the teacher operate on a corpse whilst talking of what he is doing, or assisting him to do so, or at best to very occasionally practising some one or two of the many procedures of operative surgery. That this should be the only practical teaching in operating afforded to our surgeons prior to their distribution amongst society, unless they can and care to visit some continental school, is a scandal upon the estimate at which we hold their profession; and a blunder that cannot fail sooner or later to militate very materially against both the confidence the public have in our surgeons and the confidence our surgeons have in themselves when the knife is required. At St. Thomas's some fifteen bodies were secured and preserved prior to the commencement of this session, but only six being in the dissecting-room on Tuesday week shows what sort of a supply is anticipated throughout the winter. At Guy's, on the fourteenth day of the session, there were only nine subjects, which is very ominous of a bad supply in the coming months, when we recollect the size of the school, and that they have availed themselves of the amended legislation. St. George's has five subjects in the dissecting-room, having secured three before the commencement of this session. When we visited the dissecting-rooms at St. Mary's and the Middlesex Hospitals, we saw only two subjects at the former, and but one at the latter.

At Paris there is no lack of bodies for both anatomical and operative purposes. How is it that in London each succeeding winter finds us so behindhand in providing what is essential to the thorough training of our medical men? Cannot the prisons afford a larger number than they now do? and if the secretaries at some of our hospitals were not so zealous in procuring friends to claim dead patients would not the supply be substantially augmented?

THE ORIGIN OF EPITHELIAL CANCER.

A PAPER on the mode in which epithelial cancer develops has been contributed by Dr. Vajda, of the General Hospital of Vienna, to a recent number of the *Centralblatt*. He finds that in all instances there is a remarkable system of vessels, usually of very minute size, which form a kind of bed for the epithelial outgrowth, the two standing in such intimate relation with one another that the epithelial cells may almost be regarded as resulting from the proliferation of the nuclei imbedded in the walls of the vessels. This view is further supported by the fact, that in the early stages of the affection the nuclei of the vascular walls exhibit a process of endogenous multiplication, the several nuclei becoming surrounded by protoplasm, or, rather, as it may here be called, deuteroplasm. The incipient cells are at first arranged tangentially to the walls of the vessels, but subsequently become vertically placed. When the cells have accumulated in large numbers, forming irregular masses and nodules, their vitality becomes impaired by the mutual pressure, and they undergo regressive metamorphosis, sometimes in the form of mucous degeneration, as in the epithelial cancer of mucous membranes, sometimes in that of fatty degeneration, as in epithelial cancer of the lips and labia, and sometimes in that of horny degeneration, as in epithelial cancer of the limbs and eyelids. Clinical observations teach that the degenerated cancerous parts often present numerous pale cellular elements, which, when examined on the warmed stage, exhibit lively changes of form, and throw out processes, but do not undergo any changes of place. Epithelial cancers develop rapidly wherever the tissues are loose, and where, consequently, there is little resistance to the extension of the vessels which form their substratum.

THE WATERLOO-ROAD TRAGEDY.

WE are glad to be able to give the following account, which entirely contradicts the groundless and alarming reports which have been circulated respecting the condition of the victim of this outrage. For the particulars of the case we are indebted to Messrs. Haynes and Johnson, of York-road, Lambeth, under whose care the patient has continued since the accident.

When Mr. Haynes was first called to the case, at midnight on August 28th, he found the woman, who is about the middle period of life, of composed and self-possessed temperament, suffering from three wounds caused by two shots fired from a revolver. One bullet, having entered the neck just posterior to the left sterno-mastoid muscle, had passed through the neck, and made its exit by a wound on the right side, slightly anterior to that on the left. The entrance wound was slightly charred about its edges, whilst the exit one was exceedingly small. The bullets fired were conical. A wound presented itself just above the centre of the left clavicle. The ball which caused this was presumed to be lodged, as no further wound could be found.

Very shortly after the receipt of these injuries, there was great swelling of the neck, difficulty of swallowing, and emphysema of the anterior and upper part of the chest—symptoms which gradually disappeared, with the exception of a circumscribed swelling a little to the right of the larynx, where an abscess formed, which was opened on October 1st, when only some discoloured matter was evacuated, and nothing was detected in the wound; two or three days later, however, a portion of dress was discharged from the wound, which has now healed with the exception of a small sinus.

The original wounds healed kindly in about a week or ten days, the slight expectoration of blood and mucus which was present during the first three days ceased, and the patient's general health and strength is improving rapidly. She can walk about the house, has a good appetite, and experiences no difficulty in swallowing. Mr. Haynes judges that there was some slight injury to the larynx, between the gullet and which it is possible the ball passed. This case affords another example of the miraculous manner in which important structures so often escape injury; but it would be useless to speculate upon the situation of the bullet which caused the third wound.

HINTS FOR THE GOLD COAST.

WE have already advised officers and others proceeding on the expedition to the Gold Coast to provide themselves with pocket syphon-filters and a small quantity of permanganate of potassium for the purification of water; some quinine, a dose of which might be taken daily; a small portable apparatus for heating fluids, such as that used by nurses for preparing infants' food over a lamp, with a few boxes of night-lights. A fire, however small, is always useful in a malarious climate, and a lamp burning in a tent or hut is better than nothing. The under-clothing should be flannel, and the trunk of the body should always be kept warm. As a protection against malaria and mosquitoes, we would suggest the use of veils adjusted to the helmets; and we may add, as regards mosquitoes and insects generally, of which there are numbers on the Gold Coast, that officers will find a small bottle of paraffin a very useful pocket companion for the bush, as a little of it occasionally spread upon the hands and face has an admirable effect in keeping these plagues at a distance. Moreover, it is a good plan to dip the heads of lucifer matches in a little paraffin to protect them against damp, for nothing is more annoying on a campaign or shooting expedition than to find one's matches refusing to inflame when struck. And this brings us to the use of tobacco for smoking, the effect of which we regard as good in such a climate. For the rest, our advice is—always secure some cover, however slight, at night, and place a waterproof on the ground; be temperate in all things, but live well; always have something hot, such as coffee or cocoa and milk, after a night's rest before marching. Preserved cocoa and milk is readily procured in this country of excellent quality, which can be preserved for any length of time in tins; and tea, compressed in the form of cakes, like chocolat-Ménier, is procurable in the City.

PROFESSOR HUXLEY AND MEDICAL EDUCATION.

PROFESSOR HUXLEY, Lord Rector of the Aberdeen University, has laid the following motions before the University Court, of which he is the Chairman:—

"1. That, in view of the amount and diversity of the knowledge which must be acquired by the student who aspires to become a properly qualified graduate in medicine; of the need recognised by all earnest teachers and students for the devotion of much time to practical discipline in the sciences of chemistry, anatomy, physiology, therapeutics, and pathology, which constitute the foundation of all rational medical practice; and of the relatively short period over which the medical curriculum extends—it is desirable to relieve that curriculum of everything which does not directly tend to prepare the student for the discharge of those highly responsible duties, his fitness for the performance of which is certified to the public by the diploma granted by the University.

"2. That it would be of great service to the student of medicine to have obtained, in the course of his preliminary education, a practical acquaintance with the methods and leading facts of the sciences comprehended by botany and natural history in the medical curriculum; but that, as the medical curriculum is at present arranged, the attendance of lectures upon, and the passing of examinations in, these subjects occupy time and energy which he has no right to withdraw from work which tends more directly to his proficiency in medicine.

"3. That it is desirable to revoke or alter ordinance No. 16, in so far as it requires a candidate for a degree in medicine to pass an examination in botany and zoology as part of the professional examination; and to provide, in lieu thereof, that the examination on these subjects shall, as far as possible, take place before the candidate has entered upon his medical curriculum.

"4. That it is desirable to revoke or alter said ordinance No. 16, in so far as it requires candidates for the degree of doctor of medicine to have passed an examination in Greek, and that, in lieu thereof, either German or French be made a compulsory subject of examination for said degree, Greek remaining as one of the optional subjects."

SIR JAMES PAGET.

AN act of filial piety has just been performed by this eminent surgeon, in the addition of a memorial window to the church of St. Nicholas, Great Yarmouth, the town of his birth. Admirable in design and execution, it represents Isaiah, Elisha, and Elijah, with appropriate extracts from Holy Writ, while on a brass-plate beneath is the following inscription:—"To the glory of God. In loving memory of Samuel Paget, a merchant, and Sarah Elizabeth, his wife. They and many of their forefathers dwelt in this town. They were pious, loyal, and gentle lovers of their Church and home, bountiful in prosperity, patient in adversity, honoured by friends, reverenced by their children. They lived and died hoping for deathless life through Our Lord Jesus Christ. Samuel Paget died in 1857, aged eighty-three; Sarah Elizabeth Paget in 1843, aged sixty-five. Twelve of their children rest with them in and near this church." The severe simplicity of Sir James Paget's

English has all the dignity, if not the brevity, of the finest epitaphial Latin, and is free from that straining after point which is the ruin of most epitaphs in modern Latinity, like Dr. Freind's on Prior, or Dr. Johnson's on Goldsmith. Where the style of such compositions departs from that of Orelli's or Mommsen's "Inscriptions," it is futile to ape their language.

DOING GOOD BY STEALTH.

TWELVE THOUSAND POUNDS from twelve anonymous donors were acknowledged in *The Times* of the 16th inst. by the secretaries of various metropolitan charities, some of which had received from the same donor more than one instalment of the same donation. Lord Derby's saying that a hospital is, among institutions of the kind, the one least likely to abuse the gifts of the charitable, appears to be widely and practically recognised, nearly all the charities in question being medical in their working. Even on the low ground of barter, the subsidising of hospitals is a profitable investment to the community that practises it, for such institutions are schools in which disease is effectively studied not only for its present cure, but for its ultimate prevention. Such a calculation, however, is by no means the only or the chief motive for the forthputting of charity. The donations referred to were doubtless something more than the conscience-money repaid by the rich to the poor. Ours may be, as contemporary satire is ever ready to remind us, a Mammon-worshipping age. But we hail such anonymous munificence as among the proofs that the world is not "too much with us," that "getting and spending" does not "lay waste our powers," but that there are still those among us who believe charity to be the chief of the virtues, and who from the purest of all promptings observe the precept, "he that giveth to the poor lendeth to the Lord."

THE GUEST HOSPITAL, DUDLEY.

ONE of the best features of the Hospital Sunday movement is the systematised endeavour to which it has given rise of awakening the artisan and labouring classes to a sense of their indebtedness to the medical charities in whose benefits they are the main participators. We learn with pleasure that the miners and workmen in the district which contains the Guest Hospital have been bestirring themselves on behalf of the funds of that hospital, and, through the agency of their friendly and other societies, have raised sums which may justly be called liberal. The Foresters and Odd-fellows of Dudley alone have contributed £100, and at many of the Black Country works the *employés* make a weekly subscription. On Sunday week there was a remarkable demonstration of this right feeling in the Rowley district, when about 800 members of the Foresters' Order went in procession to the church, which, after being crowded with 3000 persons, yet left so many anxious to gain admission that the vicar had to arrange for an open-air service simultaneously with that held in the church. Collections for the Guest Hospital were the special object of the day's proceedings, and they were made with a liberality that would shame the contributions of many a fashionable congregation on Hospital Sunday in other places.

DEATH CERTIFICATES.

A CORRESPONDENT of *The Times*, writing on the subject of death certificates, wishes to draw from the Registrar-General "some expression of opinion as to how far the law is or is not evaded in the giving of certificates for burial, where the cause of death has not been certified medically." We shall be rather surprised if the Registrar-General troubles himself to reply to a querist who so palpably shows that he writes under the completest misapprehension of the Registration Act. The registration certificate of death, the medical certificate of the cause of death, and the certificate for burial, are all jumbled up together instead of being properly regarded as three distinct things. The certificate for burial is a document simply stating that the death was duly registered on a given date; the question of the cause of death does not enter into it at all, for the officiating minister at the burial is not in the least concerned to know of what the person he is burying died. Into the point raised about the extent of uncertified causes of death we need not enter, inasmuch as we have gone over all that ground before. A proportion of twenty-one uncertified out of seventy-five registered deaths is, we believe, not exceptional in certain places; but we have no reason to suppose that, taking the whole country, the margin of error from this source is sufficient to impair the usefulness for general purposes of the Registrar-General's mortality tables.

THE MEDICAL COUNCIL.

THE Royal College of Surgeons of Edinburgh have unanimously re-elected Dr. Andrew Wood as their representative in the General Medical Council for the period of three years from the 8th inst. The University of Dublin will continue to be represented by Dr. Apjohn. Dr. Aquilla Smith has been re-elected to represent the King and Queen's College of Physicians in Ireland. Dr. Smith, too, has been a member since the creation of the Council, and has done good work as a member of the Pharmacopœia Committee, &c.

There seems still considerable doubt as to the future habitation of the General Medical Council, Government being apparently more anxious to have good rents for the use of its property than to find worthy accommodation for a body which is considered to be doing the State's work. There was a meeting of the Council on Tuesday to consider this question.

MR. JOHN FLINT SOUTH.

AT the meeting of the Council of the Royal College of Surgeons on Thursday, the 16th inst., a letter was read from Mr. South resigning his seat at the Council-board. Mr. South was the senior member of the Council, to which he was elected in 1841, and was the last of the life-members, having been elected prior to the charter of 1843. Mr. South was elected an examiner in 1849, but resigned the office some few years back. He was President of the College in 1851, and again in 1860, and gave the Hunterian Oration in 1844. Mr. South has been throughout his official life a staunch Conservative, and we believe took occasion in his letter of resignation to lament the revolutionary times upon which the College of Surgeons has fallen!

NEW MEDICAL STUDENTS.

ACCORDING to the returns of the Royal College of Surgeons, the following is the number of those who have registered as new students at the metropolitan medical schools this year:—St. Bartholomew's, 100; Guy's, 94; University College, 66; St. Thomas's, 53; King's College, 46; London, 38; Middlesex, 37; St. George's, 34; St. Mary's, 21; Charing-cross, 13; and Westminster, 12: making a total of 514, against 476 last session, being an increase of 38. It will be seen that these numbers differ very greatly from the returns we gave last week, which represented the actual number of fresh students. In addition to this, a large number of gentlemen have entered as occasional students, but who do not appear as new students. At the Leeds Medical School 28 new men have entered, making the total number now attending 95.

FEVER IN SANDHURST COLLEGE.

THE rumours about an outbreak of fever in Sandhurst College have, we are glad to be able to state on good authority, been greatly exaggerated. There has only been one case of fever in the whole College. That, however, was well-marked typhoid, and appeared to be due to the defective drainage of the main building. The authorities sent down Sir William Muir and Colonel Murray, R.E., to investigate the matter. They condemned the drains, and recommended that the students should be sent home for the present. This has been done, and the College is now in the hands of the Royal Engineers. The fever patient is already well again.

ERITH, CRAYFORD, AND BELVIDERE COTTAGE HOSPITAL.

THE second annual report of this hospital just issued bears evidence of usefulness and good work done. During the past year sixty cases were treated; of these forty-three were discharged cured, while there were but three deaths. Owing to the increased demand for admission to the hospital, it is now proposed to build a more spacious and better arranged building, as soon as the required funds are forthcoming. We hope the wealthy inhabitants of the neighbourhood will recognise the claims of the institution, and come to its aid.

LORD CHIEF JUSTICE BOVILL.

WE are glad to learn that Sir William Bovill is progressing most favourably. His attack, which naturally gave rise to some anxiety at the time of its occurrence, is believed to have been attributable to dyspeptic symptoms of a gouty character, and it is probable that a short holiday and respite from work will be necessary before the Lord Chief Justice is enabled to take up his judicial duties again.

A TOUCHING manifestation of the esteem in which the late Dr. John Murray was held by his professional friends took place on Monday night at the Euston Station, before the body was sent on to Aberdeen. In a part of the station which was draped in black several hundred gentlemen, including names well known in the medical world, met together to listen to the ministrations of the Rev. Oswald Dykes, of Regent-square Presbyterian Church. The service was solemn and impressive in the extreme, and will long be remembered as the "last scene of all" in a career of bright promise but of brief duration.

PROF. EBER, of Leipsic (*Allgemeine Medizinische Central Zeitung*), has obtained possession of an ancient papyrus during a recent visit to Egypt. The work is a complete treatise on Egyptian medicine, nine leaves of which are devoted to diseases of the eye. The Egyptians were in advance of all other nations of antiquity in their knowledge of ophthalmic disease. It is written in the oldest hieratic character, and is believed to be above 3400 years old. Of the 110 leaves of which the work consists, not a single letter is wanting.

THE truth about St. Peter's Hospital, its acknowledgment of donations, and its secretarial reports, is, in answer to "A Disgusted Subscriber," stated by the secretary in the *Globe*, who says that of the £10,000 received last February, £2000 were in April invested by the committee in Consols for a future site and building-ground, and that the residue (£8000) was also in April invested in New Three Per Cents. as an endowment fund. To save expense, reports are issued biennially only, the next being due in Dec. 1873.

WE understand that Mr. Wharton, Surgeon to the Meath Hospital, and Lecturer on Surgery in the Ledwich School of Medicine, is to act this session as *locum tenens* in the University of Dublin for the Professor of Surgery, Dr. Robert Smith. The numerous friends and admirers of Dr. Smith will learn with regret that he is so seriously ill as to give rise to grave anxiety in the minds of his medical attendants. Dr. Smith's treatises on "Neuroma," "Fractures," and other works, are too familiar to his professional brethren to require commendation at our hands.

A PUBLIC MEETING on the subject of the Contagious Diseases Acts was held last week at Lowestoft. Although convened under the auspices of the National Association for the Repeal of the Acts, a resolution protesting against their continuance, and pledging the meeting to oppose them, was negatived by an amendment declaring that the meeting cordially agreed with the Contagious Diseases Acts, and that it deeply regretted that lectures on such a delicate subject should be allowed to be delivered in public. The amendment was carried amid some uproar.

THE East London Hospital for Children and Dispensary for Women, Ratcliff Cross, has just received an anonymous donation of £1000. More funds are, however, greatly needed towards the erection of a new and more commodious building. This institution has great claims on the public for support and substantial sympathy, doing a large amount of good work among the denizens of Ratcliff-highway and of the now historic Wapping.

GLOUCESTER held its first Hospital Sunday on the 19th inst., when sermons were preached in aid of funds at all the places of worship in the city. The total amount collected was a little over £300, which strikes us as being very small for a place like Gloucester. The sum mentioned will be distributed amongst the following institutions:—County Infirmary, the Eye Institution, the Children's Hospital, and the Gloucester Provident Dispensary.

THE Court and Council of Aberdeen University met last week. A Committee of the Council submitted a scheme for founding fifty new medical bursaries, which was remitted for further consideration. In the Council it was moved by Professor Bain that the Court should be asked to entertain the expediency of omitting Greek as compulsory at the competitions for bursaries; but his motion was rejected by 42 to 25.

YELLOW FEVER is declining at Shreveport, the population having either fled or been killed off by the disease. Memphis (Tennessee) is now attacked, twenty deaths occurring on October 1st, and twenty-five on October 2nd. The outbreak is ascribed to the Government's cutting a channel through the Red River raft, turning adrift a vast amount of decaying vegetable matter.

OWENS COLLEGE, Manchester, is even less entitled to the honour of having the first physiological laboratory in England than was at first supposed. University College, London, furnished its students with the means of prosecuting practical research in physiology as early as 1855, when Dr. Boon Hayes superintended the course and was in a few months succeeded by Dr. George Harley, who did not resign the appointment till 1866.

THE first meeting of the Pathological Society of London this session was held on Tuesday evening last. There was a large attendance of members, and a number of interesting specimens were exhibited.

THE election for Professor of Chemistry in the School of the Royal College of Surgeons in Ireland takes place as we are going to press, on Friday, the 24th inst. The candidates are Dr. Davy, Professor of Medical Jurisprudence in the College of Surgeons; Dr. Cameron, Lecturer on Chemistry, Ledwich School of Medicine; and Dr. Emerson Reynolds, Professor of Chemistry, Royal Dublin Society.

THE Dutch Government, according to the correspondent of the *Pall Mall Gazette* at the Hague, has been badly served by "some of the foreign medical officers, who, after having pocketed an allowance of 4500 fr., ran away." Out of fifty medical volunteers from Great Britain, the Dutch War-office selected only two. Perhaps it now regrets that its choice was so restricted.

AT the meeting of the Clinical Society this evening (Friday), papers will be read by Sir William Gull, on Anorexia Hysterica, and upon a Cretinoid State supervening in the Adult. Dr. Guinier, of Montpellier, will show a new method of gargling the larynx, illustrating this upon himself.

THE death-rate of Hampstead—a district with a population of 34,000—during the past twelve months was as low as 14 per 1000. Mr. Lord, the medical officer of health of the parish, attributes this healthiness to the effect of compulsory vaccination, sewer and drainage improvements, and the more general use of disinfectants.

AMONGST the twenty surviving officers who took part in the memorable naval battle of Trafalgar, fought sixty-eight years ago, we find the name of Deputy Inspector of Hospitals Peter Suther, who during the engagement was surgeon on board the *Swiftsure*.

DR. MOORE, Lecturer on the Practice of Medicine to Trinity College, Dublin, has been appointed by the board of that University one of the Examiners in Medicine to the Conjoint Examining Body.

DR. LAW, King's Professor of the Institutes of Medicine in the University of Dublin, is very seriously ill. His state is such as to give rise to great anxiety on the part of his friends.

THE Harveian Society held its first meeting for the present session on the 17th inst., when Dr. Meadows read a paper on Pelvic Hæmatocele, which we purpose publishing.

WE understand that while large quantities of Australian beef and mutton will be sent out with the expeditionary force to Ashantee, very little pickled pork will be sent.

A CORRESPONDENT of the *Leeds Mercury* complains of the general insanitary condition of the district called *New Leeds*, and asks for an inspection.

THE LINCOLN COUNTY HOSPITAL.

THE principles which should regulate the construction and hygiene of hospitals have become generally known and acknowledged; and it should not be regarded as a matter for surprise, but rather as one for unmixed satisfaction, that an intelligent interest is taken in protecting the recipients of hospital aid from the effects of an insalubrious atmosphere. If we have not yet reached perfection in our methods of hospital construction, it can scarcely be laid to the charge of our defective knowledge of the principles by which we should be guided. Nor are these principles of a recondite character; on the contrary, they are simple and intelligible enough. The nearer the condition of the atmosphere inside the hospital approaches that of the outside, as regards its purity, the better. It is something to have grasped the fact, which our forefathers failed to recognise and some continental nations are slow in learning, that, whether it be a bandbox or a church that is occupied, the air must, in process of time, become contaminated by the presence of life within it, unless means be taken to substitute for the impure a fresh supply of pure air. It is only a question of time; but, practically, the amount of this interchange, or ventilation, is limited by the fact that we cannot with impunity expose the healthy, much less the sick, to the strong draughts of cold air that would be necessary to maintain the requisite purity in a small or crowded building. It is universally recognised that a hospital requires to occupy a good, dry, and fairly exposed site; that there should be the utmost simplicity of design in the construction of the building; that means should exist for the segregation of the cases of contagious disease; that there should be no overcrowding; that the nearer the system of ventilation approaches to what is termed the natural system the better; that the amount of ventilation cannot be reduced beyond a certain standard without injury, while it may commonly be greatly increased above it with manifest advantage; and that each separate ward-unit should possess its own separate means of ventilation, if we are to avoid the risk attending the presence of a common hospital atmosphere, which, by the time it reaches some of the hospital patients, is no longer fresh and pure, but more or less laden with exhalations and suspended matters derived from other patients or from their excreta. It is clear, therefore, that the administrative portion as well as all the accessories of a hospital should, as far as practicable, be simple in construction and limited by the requirements of the patients which the hospital is designed to accommodate, as well as properly distributed, so as to be accessible without impeding the circulation of air, instead of being massed together like the separate pieces of a puzzle, for the purpose of being packed into the smallest compass into any and every convenient vacant space. It is in most of these particulars that so many of our old hospitals have proved failures. A building which, when small, answered its purpose very well, grows with the increase of the requirements incidental to a growing population. Additions are made from time to time which are well designed to exhibit the ingenuity of the architect, but are destructive of the salubrity of the building as a hospital. For it should be well understood that the primary object of a hospital is the well-being of its sick inmates, and to this every other consideration should be subservient. We do not say, nor would it be reasonable to expect, that every hospital that does not fulfil all the modern requirements of hospital construction is to be condemned; but what we contend for is this, that the further a hospital recedes from the true type or standard of what a hospital should be, the less does it fulfil its purposes, until at last it ceases to possess a *raison d'être*. We confess that, as far as the principles of hospital construction are concerned, sanitarians have pretty well exhausted the subject, however much we may have yet to learn as to the simplest and most economical methods of applying them. It is rather in the direction of personal hygiene, sanitary administration, and internal details, that we think so much yet remains to be done, but these must of course prove futile if the first and larger principles of hospital construction be set at defiance.

Guided by the foregoing considerations, we have carefully perused all the reports and documents that have been published in regard to the Lincoln County Hospital. It is at present a vexed question whether it would be possible so to alter and amend this hospital as to render it capable of efficiently meeting the pressing needs of the population of the county and city, or whether this can only be effected by its entire reconstruction. The present building was first used as a hospital in October, 1777. Though in some respects defective, it was originally more than adequate to the wants of the population, and it fulfilled its purpose

very well. But the prosperity of Lincoln has vastly increased, and the population with it. The latter had grown from 7205 in 1801 to 26,762 according to the last census, and the population of the county has more than doubled since the commencement of the century. The site appears to be, on the whole, a good one, but it is too contracted, and very inconvenient for building purposes. In the present condition of the wards, in the construction of the corridors and staircases, and in the arrangement of the ward accessories and out-patient department, the present hospital is undubitably far behind what a public institution of the kind should be; and we do not see how it would be practicable to remedy these defects by any alteration of the present construction. Large portions of some of the wards are unprovided with proper ventilation, and, with the existence of narrow and dark corridors, we do not see how the proper circulation of air can be obtained. The watercloseta are insufficient and badly placed; the dead-house is in too close proximity to a portion of the hospital; the lavatory and nursing arrangements are insufficient or bad; and the offices, sculleries, &c., are too small and cramped together to admit of efficient administration. The position of the out-patients' department, especially, is very objectionable, and the dispensary and lobby are inconveniently small and otherwise defective. The hospital has been chiefly a county hospital in the past; but Lincoln is quickly growing, as we have seen, into a considerable manufacturing town, and its need of hospital help will soon be greater than that of the county. After having inspected the plan of the hospital appended to the copy of Dr. Bristowe's report of the building, and considered the defects indicated by Sir James Paget and Mr. Thomas Sympson, the visiting surgeon of the hospital, and others, we have no doubt that the best and, in the end, most economical course will be to erect a new building as a substitute for the present one.

Since the foregoing was in type, we have had an opportunity of perusing a copy of Captain Douglas Galton's inspection report. Captain Galton proposes such extensive alterations that they may almost be said to amount to a reconstruction of the building: and their execution would cost about half the sum required to build an entirely new hospital. That the effect of these alterations would be to improve very materially the ventilation and the amount of watercloset and scullery accommodation, as well as the arrangements for nursing, there can be no doubt. But Captain Galton's projected alterations are open to certain objections, which we feel sure he would be the first to admit. If they were effected the hospital would be spread over a great space; the greater part of the buildings would be placed on a plot of ground in which the hospital governors have at present only a life interest; the buildings at the east end would be in very close proximity to old houses, and would obstruct the free play of air; the sculleries and watercloseta would be inconveniently placed; the kitchen would be far from the wards and the lift; the corridor would not be widened; the operating theatre would be contiguous to the post-mortem-room, and instead of being nearly central, it would be placed at the western extremity of the grounds; the matron's department would be too far from the kitchen; and there would be no improvement in the approaches. We see no reason for modifying the opinion we have formed, that the preferable course for the governors is to erect a new hospital. Our great difficulty, however, is as to the site. Apart from any objection that may be taken to its surroundings, the position of the present hospital on a steep hill, and the inequality of its surface must, as Captain Galton has indicated, make building upon it very expensive.

A FREAK OF NATURE.

UNDER the unphysiological name of "L'homme-chien" there is at present being exhibited in Paris a Russian peasant of most remarkable appearance, whose portrait, with that of his son, we have engraved from photographs. The father, Andrian Jeftichjew, aged fifty-five, was born near Kostrema in Russia. His whole face, nose, forehead, cheeks, and ears are covered with long brown hair, which extends also down his back for some little distance. The skin beneath the hair is apparently healthy, and no unnatural discoloration is to be seen even where the hair has been cut in order to enable the man to see. The French description likens his appearance to that of a "King's-Charles" (*sic*), but the resemblance is really more to a Skye-terrier, and reminds one of Leech's sketch of the hirsute youth who failed to see the beauties of his sister's "ugly beast of a

dawg!" The son, Fedor, is only three years old, and the hair is so much lighter in colour and less thick that the skin is much more perceptible. The resemblance between father and son is, however, unmistakable.

A remarkable feature in both father and son is their nearly edentulous condition. The father is said to have had no teeth up to the age of seventeen, and then to have had four teeth only in the lower, and one in the upper jaw. The boy has only four incisor teeth in the lower jaw, and his gums give no evidence of there being germs of other teeth within them. These remarkable individuals have been examined at Berlin by Professor Virchow, who has published some remarks upon them in the *Berliner Klinische Wochenschrift* (No. 29, 1873), a translation of which appeared in the *Edinburgh Medical Journal* for September.

In a small work on the Human Hair, published in 1869, Dr. Herman Beigel has collected a number of somewhat similar cases of hirsute growth, the most remarkable occurring in a family in Burmah, three generations of which have developed a growth of hair on the face much resembling that of the Russians now being exhibited. These individuals in Burmah had also the peculiarity of being nearly edentulous, one of them, a male aged thirty, having only four incisors and the left canine in the lower jaw, and but four incisors in the upper jaw; and another, a female, having the same absence of all back teeth, though her female child of five years is said to have had a complete first set of teeth.

A well-known example of unusual hirsute growth was seen some years ago in London in a woman called Julia Pastrana, who possessed a fine beard and an irregular double set of teeth, and whose body was also covered with hair. A remarkable instance of hair covering the body, occurring in St. Bartholomew's Hospital, is also described and figured in THE LANCET of August, 1867.

The statement that a race of hairy men existed in Japan has been supported by Mr. Martin Wood, who read a paper before the Ethnological Society of London in 1865 on "The Hairy Men of Yesso," but denied in the "Memoirs of the Anthropological Society of London" by Mr. Barnard Davis, who shows that the hairiness of the bulk of the race in question is in no way exceptional. Virchow also, in the lecture we have referred to, states positively that neither in respect of the arrangement of the hair nor in regard to the teeth have these Ainos of Japan any analogy with the Russian or Burmese hairy men.

Mr. Darwin, in his work on "Animals and Plants under Domestication," has not failed to notice the relation between the abnormal growth of the hair and the teeth, and is of opinion that these cases forcibly call to mind the fact that the two orders of mammals—the edentata and cetacea—which are the most abnormal in their dermal covering, are likewise the most abnormal either by deficiency or redundancy of teeth.

METROPOLITAN HOSPITAL SUNDAY.

A LARGE and influential public meeting, convened by the Lord Mayor, Sir Sydney Waterlow, was held at the Mansion House, on Wednesday last, for the purpose of settling the preliminary arrangements for the Hospital Sunday of 1874, and of electing the council for that year. There were present, among others, the Bishop of London, Bishop Claughton, the Archimandrite Morphinos, Canon Miller, Canon Gregory, the Rev. T. J. Rowsell, the Rev. W. G. Humphrey, the Rev. Robert Maguire, the Rev. R. G. Macmullen, Lord Mahon, M.P., Sir Anthony de Rothschild, Mr. Alderman M'Arthur, M.P., Mr. Samuel Morley, M.P., Mr. Alderman Lusk, M.P. (Lord Mayor elect), Mr. E. B. Martin, Mr. E. H. Currie, Mr. J. G. Pitcairn, Mr. Jervoise Smith, Mr. Brudenell Carter, Mr. Thomson Hankey, and Dr. J. G. Glover.

The following are the resolutions which were passed. (It is unnecessary to report the speeches in support of the resolutions, which have been more or less fully reported by our daily contemporaries.)

1. That the success of Hospital Sunday, 1873, has been such as to justify the promoters of the movement in making arrangements for a similar collection in 1874.

2. That Sunday, June 14th, be fixed for Hospital Sunday in 1874.

3. That the co-operation of ministers of all denominations be again invited.

4. That the following noblemen and ladies and gentlemen be nominated to serve on the Council in 1874 (with power to add to their number)—viz.:

President and Treasurer.—The Right Hon. Andrew Lusk, M.P., Lord Mayor, 1873–1874.

Chairman of the Council.—Sir Sydney H. Waterlow, Bart.

Council.—Clerical Members: The Bishops of London, Winchester, and Rochester; Archbishop Manning, Bishop Claughton, the Dean of St. Paul's, the Dean of Westminster, Archimandrite Morphinos, the Chief Rabbi, the Revs. Canon Miller, Canon Liddon, Canon Gregory, Canon Oakeley, Dr. J. Kennedy, Canon Nisbet, Provost Hunt, Dr. Parker, J. Thain Davidson, R. Temple West, J. F. Kitto, Dr. Gilbert, J. Bardsley, F. G. Blomfield, Dr. F. C. Finch, Dr. J. H. Rigg, R. H. Marten, T. J. Rowsell, W. G. Humphrey, J. E. Kempe, W. Rogers, B. H. Ascher, Marmaduke Miller, Robert Maguire, G. Bowden, Dr. Sadler, T. Newton, A. W. Thorold, J. F. Lingham, F. Tucker, Dr. Landels, Dr. Allon, Dr. Walter Morison, G. T. Perks, Gordon Calthrop.—Lay Members: Duke of Norfolk, Marquis of Bute, Earl of Derby, Earl Russell, Earl of Shaftesbury, Lord Mahon, M.P., Lord G. F. Hamilton, M.P., Hon. E. A. Capel, Sir Anthony de Rothschild, Bart., Sir W. W. Gull, Bart., Sir C. H. Mills, Bart., M.P., Major-General Sir C. H. B. Daubeney, Sir Jas. Paget, Bart., Sir Charles Trevelyan, Bart., Sir B. S. Phillips, Sir Francis Lycett, Sir F. Hicks, Alderman Finnis, Alderman Cotton, W. H. Smith, Esq., M.P., C. Reed, Esq., M.P., Samuel Morley, Esq., M.P., Dr. Andrew Clark, George Moore, Esq., Herbert Brooks, Esq., Edward Thornton, Esq., R. B. Martin, Esq., E. H. Currie, Esq., J. G. Pitcairn, Esq., E. H. Scott, Esq., P. P. Bouverie, Esq., Robt. Few, Esq., H. C. Robarts, Esq., Joseph Fry, Esq., Arthur Currie, Esq., Captain Arthur Pallisar, Jervoise Smith, Esq., Jabez Hogg, Esq., Daniel Cronin, Esq., W. Whitbread, Esq., Thomson Hankey, Esq., O. E. Coope, Esq., Dr. J. G. Glover, A. G. Sandeman, Esq., Brudenell Carter, Esq., Dr. J. G. Wakley, T. Turner, Esq., Dowager Marchioness of Lothian, Baroness Burdett Coutts, the Lady Mayoress, Lady Waterlow, Mrs. Gladstone, Miss Stanley, Mrs. Garrett-Anderson.

5. That in accordance with the wish contained in the Report of the Committee of Distribution, to the effect that some expression of opinion should be given as to the relative claims of hospitals and dispensaries upon the sympathies of the public, a committee be formed to consider and confer with the Council. The committee to contain representatives of both classes of institutions, whether members of the Council or otherwise.

6. That the system of distribution be based upon the last three years' expenditure of each institution, after deducting the income derived from endowments, realised property, and legacies exceeding £100.

7. That no institution be admitted to participate in the distribution of the fund if the Committee of Distribution find the cost of its management exceed a reasonable percentage of the whole current expenditure, and that it be an instruction to the Council to include amongst the members of the Committee of Distribution at least one member of the medical profession not directly connected with the management of any metropolitan hospital.

8. That Messrs. E. H. Currie and R. B. Martin be re-appointed honorary secretaries, and that the cordial thanks of this meeting be tendered to them for their valuable services since the commencement of the movement.

The meeting closed with a vote of thanks to the Lord Mayor.

Correspondence.

"Audi alteram partem."

THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Having kept an account of the number of members admitted annually by the College of Surgeons since I became a member—alas, now six-and-thirty years ago—I think, considering it is likely there may be a change effected in the mode of granting diplomas—if there is to be any outcome of the committee elected now a year ago by the different medical authorities in England,—it may be that those who have to constitute the new order of things should

have some statistics whereon to base their calculations as to the funds that are likely to be at their disposal. I enclose you a table showing the number of diplomas granted by the College of Surgeons of England in each year from 1838 to 1873 (each year being twelve months, ending Midsummer in that year—i.e., the collegiate year), by which it will be seen that in that time 16,146 diplomas have been issued. (I have not included the diplomas granted to *fellows* not heretofore *members*, the numbers being so small; I doubt if more than twenty fellows have been admitted who were not previously members, but Mr. Stone could tell the exact number.) This table shows that the annual average of diplomas has been 448½, but this average would be of no use to those who have to calculate the number of candidates likely to present themselves for examination in future years, as the averages vary so much. I have divided the whole into six periods, with this result. In the first six years 3651 members were admitted, annual average 608½; the second six years 2281, annual average 380½; the third six years 2577, annual average 429½; fourth six years 3249, annual average 541½; fifth six years 2468, annual average 411½; last six years 1920, annual average 320½. In the first six years the annual average nearly doubled that of the last six years, notwithstanding the great increase in the population of the country. The largest number admitted in one year was in 1859—viz., 675; this is to be accounted for, as the New Medical Registration Act was passed the year before. The next largest number was in 1843—viz., 645, the year of the new charter, many no doubt presented themselves for examination in that year to obtain the benefit of the charter. The smallest number was in 1871—viz., 291.

The declension of the number of candidates for the diploma is worthy of the consideration of those who have to make the new arrangements. Is the decline due to the increase of the number of diplomas granted by other medical corporations? I think a return printed by the order of the House of Commons last year will say no. Then how is it that surgery as a profession is less appreciated than formerly? There are some statistical curiosities worth mentioning. In one year exactly 600 were admitted—the only year in which there were not odd numbers. In two years the numbers were exactly the same—viz., 404. In the years immediately following the granting of the new charter (1843), the decline was very rapid, from 645 till it reached, in 1849, 341. It rose again in 1859 to 675, but in the last six years the number never exceeded 383—viz., in 1873. The number of diplomas granted by the College of Surgeons of England in each year has usually been the basis for calculating the number of persons entering the medical profession, so that the statistics I send you will, I think, be the best for the calculation of the number of persons likely to offer themselves for examination. Should the committee elected for the purpose of forming one board of examiners for England be able to carry out the scheme they have recommended, I think that 400 is likely to be about the number to apply in each year, should there not be a great alteration in the opinions of those who have to choose a profession, of the advantages offered by the profession of medicine.

Whilst on the subject of statistics, I may cite some showing how *prizes* are appreciated by the medical profession. The Jacksonian Prize was first offered for competition, according to the "Calendar," in 1801, and during the seventy-two years in which it had to be adjudicated, in thirteen years no dissertations were received, in seven years no prize was awarded—that is, in those years no dissertation received was thought worthy of the prize. The College augmented the number of subjects to be written on in different years to as many as thirty-three, of which on thirteen occasions no dissertation was received, and on nine occasions no prize was awarded.

The College Triennial Prize was instituted in 1822. There have been sixteen years in which the prize ought to have been given. In seven years there were no dissertations received, and in three years no award, so that the prize has only been awarded in six years out of sixteen—in one year to two individuals,—and one person has received the prize in two different years.

I am, Sir, your obedient servant,

Savile-row, Oct. 18th, 1873. CHARLES HAWKINS.

HEALTH OFFICERS AND "QUARTERLY RETURNS."

To the Editor of THE LANCET.

SIR,—I have a rather difficult nut to crack just now, as medical officer of health to a rural sanitary board, and shall be glad to know how my brother officials are managing the matter. You are doubtless aware that it is one part of my duty (holding the office I do) to make a quarterly return of mortality and sickness to the Local Government Board, and I have just had sent to me the forms in question. I naturally laid them before my sanitary authority, and asked them to request the medical officers of the union and the various registrars to make such returns to me as would enable me to fill up the forms. My sanitary board (through the chairman) informed me that "they should not take any trouble in the matter, or ask for returns from the gentlemen above named, because if they did they might have to pay for them; and so it would be for me to write and get them if I could, and pay for them, if I felt disposed, out of my own pocket."

Such a reply as this is extremely annoying to me in more ways than one. I do not wish to begin a wrangle with the board to which I am attached, neither do I wish to establish a precedent by taxing myself with an expense which I cannot think in common fairness ought to be thrown upon me. I have already been saddled with all *postage* expenses belonging to my office, and I feel that the habit of concession may be carried too far.

I am pained to find my sanitary board viewing their new duties with coldness, if not positive aversion, and splitting hairs about the expenditure of a few pounds is no very favourable augury for the future progress of sanitary reform hereabout.

It strikes me that if the Local Government Board demand these quarterly returns, they should have pointed out a little more clearly that it was the bounden duty of each sanitary board to make due provision for obtaining them. Surely some inspectors will shortly make a tour of the provinces. I should like "a chiel amongst us taking notes," even if they should only chance to be notes of admiration, not to say astonishment.

I remain, Sir, yours truly,

Oct. 11th, 1873. NIL DESPERANDUM.

THE MEDICAL DIRECTORY FOR 1873.

To the Editor of THE LANCET.

SIR,—Though perhaps the beginning of the year was the time to call the attention of the editors of the "Medical Directory" to inaccuracies in that volume for 1873, yet I take the liberty of doing so just now, considering that a new copy will presently be under process of publication. The usual custom throughout the "Medical Directory" up till this year was to prefix an asterisk to the names of those gentlemen who have not registered under the Medical Act, but on looking at the division of "Med. Practitioners Resident Abroad" in the "Directory" for 1873, I find that there is no distinction between the registered and the unregistered, although a great number in that list have not their names on the Medical Register. Previous to this year no name appeared in that list unless it was registered, which would perhaps be the best plan to follow throughout the book, considering that nearly every, if not every, medical man in practice, if he be not a quack, is registered. But, at all events, give a man the credit of having paid £5, though it be nothing more.

Another inaccuracy is this, there are certain gentlemen whose names appear in the Medical Register, but yet I cannot find them in the "Directory." Of this I can give numerous instances if called upon to do so, but in the meantime I will give only one—viz., that of Dr. Matthew Bass Smith—the reason for which I know not, considering that the General Medical Council only ordered his name to be erased in April, unless the editors were prophets, and positively knew his name would be struck off. Hoping you will insert this in your next number,

I am, Sir, yours, &c.,

Edinburgh, October 20th, 1873. MEDICUS.

STAFFORDSHIRE AND TYPHOID FEVER.

To the Editor of THE LANCET.

SIR,—I see that your Commissioner has roused the authorities of South Staffordshire at Wolverhampton; would he take pity on North Staffordshire, for the existing circumstances are these. The North Staffordshire Infirmary, built about four years ago, on the most approved principles and splendidly situated, has not been free for any length of time from typhoid fever during the last three years, many patients and officials having caught the disease, and not a few having died. The cause of all this is pretty obvious to most people, but the Committee of the above-mentioned infirmary have done practically nothing to remedy this deplorable state of things.

I enclose my card, and am, Sir, yours, &c.,

A WELL-WISHER TO NORTH STAFFORDSHIRE.

October 21st, 1873.

Obituary.

JOHN THURNAM, M.D., F.R.C.P.,

DEVIZES.

BY the sudden death of this able and highly respected physician on the 24th of September last the Wilts County Asylum sustained a loss which will not be readily replaced.

Dr. Thurnam was born at Ludcroft, near York, on Dec. 28th, 1810. As his parents belonged to the Society of Friends his education was of a private character; but to the excellence of it, it may with justice be said, the pupil was a living testimony.

After passing through the required course of medical study he became a member of the Royal College of Surgeons of England in 1834. In the same year he was appointed resident medical officer of the Westminster Hospital, which office he held till 1838, when he was chosen as the superintendent of the Retreat near York. In 1843 he became a L.R.C.P., and in 1846 M.D. of King's College, Aberdeen. During the above periods he distinguished himself by the zeal and ability with which he cultivated various branches of medical science. Amongst others may be cited the various published memoirs which he contributed on different pathological subjects, more especially those on Partial and Spontaneous Aneurism of the Heart; to the great merits of which all writers on cardiac diseases of that period, whether in this country or on the Continent, have borne testimony.

During his residence at the Retreat he published, in 1841, the Statistics of the Retreat, and in 1843 Observations on the Statistics and Treatment of Insanity. Those only who have been somewhat extensively engaged in statistical researches will be able fully to appreciate the amount of labour and care required to ensure the accuracy which generally characterises Dr. Thurnam's work.

Before referring to the chief scene of his labours, we think it will not be out of place here to remark that, though he evinced so much assiduity in the pursuit of strictly medical subjects, it was by no means to the exclusion of other branches of scientific research. As a Fellow of the Society of Antiquaries, Dr. Thurnam, by his joint editorship of "Crania Britannica," his "Observations on British and Gaulish Skulls," and by various contributions to the different journals on allied subjects, earned for himself no mean place in the domain of archæology. In the Wilts Archæological Society, as a member of the council, he had in different ways rendered valuable service, and in the annual excursions of the Society he was not unfrequently looked to as an expositor of the objects of scientific interest which were being visited.

In 1849 he was selected by the magistrates of the county of Wilts as the suitable and proper person to whom to entrust the management of first establishing and afterwards of superintending the county lunatic asylum, which was opened for the reception of patients in 1851. The ability manifested and the success which attended his labours in this important undertaking may be considered as having fully justified their choice. The evidences of painstaking diligence and high conscientiousness he had shown in the pursuit of medical science were the more manifestly developed in the discharge of the duties which he had now undertaken. It is well known to the writer that not only was Dr. Thurnam much respected as well as beloved by the poor patients in the midst of whom he spent so large a portion of his life, but in the difficult duty of governance, his patience and tact in settling disputes which from time to time might occur, won for him the title of "peace-maker."

For some time previous to his death he had complained of headache and drowsiness, but which, he had hoped, change and rest would prove adequate to remove. Not having been able to effect his purpose of taking a holiday, he remained at his post to the last, and even on the morning on which he died had been into the wards of the asylum to attend to some sudden call of duty. His last words evidenced the possession of unimpaired faculties immediately previous to the apoplectic seizure which terminated his existence.

Dr. Thurnam has left behind a widow and three sons, with whom we know a large circle of friends, both lay and professional, deeply sympathise. Of him it may be truly said that he died beloved and lamented. Both attendants and patients (those of the latter who were in a condition to comprehend what had occurred) evinced most sincere grief at their unexpected loss.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 16th:—

Eastall, Henry Francis, Shooter's-hill-road.
Waller, William Bevan, Milner-square, Islington.

The following gentleman also on the same day passed his Primary Professional Examination:—

Crawshaw, Benjamin, London Hospital.

COLLEGE OF PHYSICIANS, IRELAND.—At examinations recently held the following gentlemen obtained the licences in Medicine and Midwifery:—

MEDICINE.—George Deane Bourke, Patrick Horne, Michael James Kelly, Edward William Kelsall, George Legge Buchanan Stoney, Joseph Hines Wolfenden.

MIDWIFERY.—George Deane Bourke, Michael James Kelly, Edward Wm. Kelsall, William Stoker, George Stoney, Joseph Hines Wolfenden.

DR. WILLIAM ADYE is a candidate for the coronership of Wilts.

THE Excise duty on medicine vendors last year was over £7000.

DR. GODFREY, medical officer to the Clonmoyle Dispensary district, after upwards of half a century's service, has been accorded a retiring allowance of £93 per annum.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—At the annual meeting of the College on the 15th inst., the following office-bearers were elected for the ensuing year:—President: Dr. James Simson. Treasurer: Dr. John Gairdner. Secretary: Dr. Robert Omond. Librarian: Dr. Archibald Inglis. President's Council: Dr. James S. Combe, Dr. Andrew Wood, Dr. James Dunsmure, Mr. Wm. Walker, Dr. Henry D. Littlejohn, Dr. Patrick H. Watson. Dr. John Gairdner (*ex officio*).

CAMBRIDGE LOCAL EXAMINATIONS AND MEDICAL STUDENTS.—The following grace received the sanction of the Senate of the University of Cambridge on the 16th ultimo:—"That, on the recommendation of the Local Examinations Syndicate, a student, though he is above the age of sixteen, may be admitted to the examination for students under that age, provided that he produces a certificate signed by a graduate of the University, or a member of the medical profession whose name is on the Medical Register, that such graduate or member believes him to be *bonâ-fide* intending to become a medical student; and that the names of students admitted under this condition and satisfying the examiners be sent to the Registrar of the General Medical Council, but that the ordinary certificates be not granted to such students.

BRADFORD MEDICO-CHIRURGICAL SOCIETY. — At the annual meeting of this Society, held on October 14th, 1873, Mr. Whalley, M.R.C.S., was elected President *vice* J. H. Bell, whose term of office had expired. Mr. J. Mossop, L.R.C.P. Ed., was re-elected treasurer, and Dr. Goyder secretary, Drs. Lee and Rabagliati being re-elected as pathologists for the ensuing year. The Society is in a flourishing condition, and increases its members and usefulness year by year.

Medical Appointments.

ADAMS, R., M.D., F.R.C.S.I., has been appointed a Consulting Surgeon to the Richmond Hospital, Dublin, on resigning as Surgeon.

BAKER, W., F.C.S., has been appointed Public Analyst for the West Riding of Yorkshire.

BIGGS, J. S., M.D., has been appointed a Visitor of Houses licensed for the reception of Lunatics within the County of Surrey.

BRIGHAM, H. G., L.R.C.P.Ed., M.R.C.S.E., has been appointed House-Surgeon and Pathologist to the Victoria Hospital for Sick Children, Chelsea, vice Peregrine, resigned.

CAMERON, J., M.B., has been appointed an Assistant Medical Officer to the Crichton Royal Institution, Dumfries.

CAMPBELL, J., M.B., M.R.I.A. (Lecturer on Chemistry at the Carmichael School of Medicine), has been appointed Professor of Chemistry at the Catholic University, Dublin, vice Sullivan, resigned.

CROWN, G. W., M.B., C.M., has been appointed House-Surgeon and Secretary to the Hartlepool Hospital and Dispensary, vice Drake, resigned.

DALBY, W. T., M.D., has been appointed a Visitor of Houses licensed for the reception of Lunatics within the County of Surrey.

DURRANT, C. M., M.D., has been appointed Visiting Physician to the Lunatic Asylums in Ipswich.

GARDNER, R. C., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer for District No. 6 of the Stroud Union, vice Wm. Gardner, M.R.C.S.E., resigned.

GREENE, J. S., M.R.C.S.E., has been appointed Medical Officer for the Priors Lee District of the Shiffnal Union, vice J. Greene, M.R.C.S.E., resigned.

HALL, F. A., M.R.C.S.E., has been appointed a House-Physician to St. Bartholomew's Hospital, vice Yate.

HART, P. J., L.R.C.P.Ed., L.K.Q.C.P.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Cloonbur Dispensary District No. 2 of the Oughterard Union, Co. Galway, vice Gresly.

HESLOP, T. P., M.D., has been appointed a Consulting Physician to the Birmingham and Midland Free Hospital for Sick Children, on the expiration of his twelve years' term of office as Physician.

HOWKINS, T., M.R.C.S.E., has been appointed Consulting Surgeon-Dentist to the Birmingham and Midland Free Hospital for Sick Children, on the expiration of his twelve years' term of office as Surgeon-Dentist.

HOYLE, G., M.B., C.M., Junior House-Surgeon, has been appointed House-Surgeon to the Halifax Infirmary, vice Morrill, resigned.

JARMAIN, G. (Professor of Chemistry at Huddersfield College), has been appointed Public Analyst for Huddersfield.

JEPSON, E., M.R.C.S.E., has been appointed a House-Surgeon to St. Bartholomew's Hospital, vice Brewer.

JESSOPP, J., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Referee (for the Braintree District) to the Essex Provident Society: £35 per annum.

LETHEBY, H., M.B., has been appointed a Public Analyst for East Suffolk: 21s. per analysis for first 100, 10s. 6d. for second 100, and 6s. beyond.

LUSH, W. J. H., M.R.C.S.E., L.R.C.P.Ed., L.M., has been appointed Medical Officer for the Fyfield District of the Andover Union, vice Hammond, resigned: £85 per annum.

MAHON, C. J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballycroy Division of the Achill Dispensary District of the Newport Union, Co. Mayo, vice Gribbin, resigned.

MAXWELL, Dr. T., has been appointed Medical Missionary to Kashmir, vice Elmslie, deceased.

MAYER, J. E., F.R.C.S.E., has been appointed Medical Officer for the Sheriff Hales District of the Shiffnal Union, vice Johnson, resigned.

MILLS, J., M.R.C.S.E., has been appointed a House-Surgeon to St. Bartholomew's Hospital, vice Poignand.

PAIN, T. D'O., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Tollerton District of the Great Ouseburn Union, vice Fall.

RYAN, C. E., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Emly Dispensary District of the Tipperary Union, vice T. B. Ryan, L.K.Q.C.P.I., M.R.C.S.E., superannuated.

RYAN, R., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Midleton No. 2 Dispensary District of the Midleton Union, Co. Cork, vice Barry, resigned.

SCOTT, T. B., M.R.C.S.E., has been appointed a House-Physician to St. Bartholomew's Hospital, vice Furner.

SHARMAN, M., M.R.C.S.E., has been appointed a Consulting Surgeon to the Birmingham and Midland Free Hospital for Sick Children, on the expiration of his twelve years' term of office as Surgeon.

SMITH, R. W., M D, F.R.C.S.I., has been appointed a Consulting Surgeon to the Richmond Hospital, Dublin, on resigning as Surgeon.

STEVENSON, W. E., M.R.C.S.E., has been appointed a House-Surgeon to St. Bartholomew's Hospital, vice Doran.

STRUTHELL, F. W., M.R.C.S.E., has been appointed an Ophthalmic House-Surgeon to St. Bartholomew's Hospital, vice Stowers.

TAYLOR, H., M.B., M.R.C.S.E., has been appointed a House-Physician to St. Bartholomew's Hospital, vice Greensill.

TIDY, C. M., M.B., has been appointed a Public Analyst for East Suffolk: 21s. per analysis for first 100, 10s. 6d. for second 100, and 6s. beyond.

VENN, A. J., M.D., has been appointed a Midwifery Assistant to St. Bartholomew's Hospital, vice Jepson.

WAYLEN, G. S. A., M.R.C.S.E., has been appointed a House-Surgeon to St. Bartholomew's Hospital, vice Crippa.

WILMOT, J. B., M.D., has been appointed a Visitor of Houses licensed for the reception of Lunatics within the Eastern Division of Sussex.

Births, Marriages, and Deaths.

BIRTHS.

CALTHROP.—On the 1st ult., at Patialah, Punjaub, the wife of C. W. Calthrop, M.D., Sanitary Commissioner, of a son.

KERR.—On the 18th inst., at Markyate-street, near Dunstable, the wife of N. S. Kerr, M.D., F.L.S., of a daughter.

M'LEOD.—On the 21st ult., at Chowringhee-road, Calcutta, the wife of Surgeon K. M'Leod, M.D., Secretary to the Surgeon-General Indian Medical Department, of a daughter.

MORRIS.—On the 7th inst., at Euston-place, Leamington, the wife of Joseph Morris, Surgeon, of a daughter.

PRICE.—On the 13th inst., at Kettering, Northants, the wife of J. Lowe Price, M.R.C.S.E., L.S.A.L., of a son.

SUTTON.—On the 22nd inst., at the Norwich Borough Asylum, the wife of Frederick Sutton, Resident Medical Superintendent, of a son.

VEITCH.—On the 18th inst., at Middlesbrough, the wife of W. Y. Veitch, L.R.C.P.Ed., &c., of a daughter.

MARRIAGES.

BEAUMONT—PERFECT.—On the 13th inst., at West Malling, Robert W. Beaumont, M.R.C.S.E., Staff Surgeon H.M.'s Ship "Northumberland," to Jane (Jeannie), daughter of the late Geo. Leopold Perfect, M.D.

DAVIES—ALLEN.—On the 16th inst., at St. Stephen's, Avenue-road, St. John's-wood, David J. Davies, Esq., of Liverpool, to Elizabeth Annie Laurence, eldest daughter of David John Allen, M.D., of Wellington House, St. John's-wood.

HARVEY—HOGG.—On the 15th inst., at Kill Church, Reuben J. Harvey, M.D., of Upper Merrion-street, Dublin, to Mary, daughter of the late Wm. Hogg, Esq.

DEATHS.

CALTHROP.—On the 1st ult., at Patialah, Punjaub, the infant son of C. W. Calthrop, M.D., Sanitary Commissioner.

DORWARD.—On the 18th inst., at Haddington, Inspector-General James Dorward, Madras Army, retired.

GILMOUR.—On the 21st inst., at High-street, Linlithgow, Catherine Robertson, wife of Dr. Andrew Gilmour.

HUTTON.—On the 16th inst., at Leamington, Elizabeth, wife of G. A. Hutton, M.R.C.S.E., Surgeon-Major 2nd Batt. Rifle Brigade, aged 35. Deeply mourned.

MARCHBANK.—On the 11th inst., at Glasgow, J. Marchbank, L.F.P. & S. Glas., of Oakenshaw, Willington, Durham, aged 63.

SMETHURST.—On the 18th inst., Thos. Smethurst, M.D., of Brompton-square.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, OCT. 23RD, 1873.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radiation in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Oct. 17	30·16	W.	46	47	84	62	43	...	Foggy
„ 18	30·08	S.S.W	52	54	56	54	44	0·08	Overcast
„ 20	29·83	N.W.	50	52	76	55	48	0·03	Overcast
„ 21	29·96	N.W.	42	45	62	56	37	0·21	Fine
„ 22	29·27	WNW	53	56	74	58	43	0·26	Overcast
„ 23	29·05	S.W.	49	49	...	...	46	...	Raining

Notes, Short Comments, and Answers to Correspondents.

THE GERMANS IN THE FAR WEST.

J. D. S., (Woking.)—It is true that the thrifty, intelligent, generally well-educated German is not, at least in the Western World, a supporter of woman-suffrage or the lady-doctor movement. He generally goes so far as not to seek in his wife an intellectual companion. The German population in America are marked off from the rest of the community by sharply defined characteristics. According to the *Atlantic Monthly*, "they like a doctor of their own, and a lawyer when they can find one. The German seems to have conscientious—it were more correct perhaps to say gastronomic—scruples against being physicked by an American doctor; for deep in his soul lies the conviction that no one but a German can understand the intricacies of a genuine German stomach." American doctors, in fact, have not yet been able to "rectify" the professional frontier.

Mr. W. Dougall, (Edinburgh.)—The subject shall have our early attention.

INFANTICIDE.

To the Editor of THE LANCET.

SIR,—In reply to the curious letter of Dr. Holmes Morrison, will you allow me to quote from the "Medical Jurisprudence" of Dr. Beck. That eminent author, when speaking of infanticide, says: "Needles or other sharp instruments are sometimes thrust into other parts of the child, such as the temples, the internal canthus of the eyes.....In all the cases where death has been produced in the preceding ways, dissection alone can reveal the cause."

Yours truly,

Dublin, October 18th, 1873. W. HANDSEL GRIFFITHS.

GLYCERINE AS A MEANS OF DISGUISING MEDICINES.

IN the *Philadelphia Medical Times* for September 20th is an article on this subject. It is stated that if castor oil be mixed with an equal part of glycerine and one or two drops of oil of cinnamon to the dose, it can scarcely be recognised. The writer affirms that he has used this mixture a great number of times, and can confirm all that has been said of it. Children take it out of the spoon without difficulty, and it has been given to doctors without their discovering that they were taking castor oil. This hint, which we remember to have seen before, may be well worth acting upon, considering the nauseous character of castor oil to most persons.

Rusticus Expectat, (Berwick-on-Tweed.) — Lactometer, lactodensimeter, creasometer, are as untrustworthy as their etymology is barbarous. The first-named instrument, for example, should be "lactimeter." We are surprised to find in Dr. E. Smith's recent work on "Food" such implicit confidence expressed in its indications. There is no work on Milk Analysis at all adequate to the importance of the subject.

Mr. George MacGill, (Littleborough.)—The advertiser is an old offender in the matter, with whom it would be better to deal by taking no notice of his advertisements.

Dr. Hawkes's paper shall be published very shortly.

PRIORITY IN THE TREATMENT OF PHTHISIS BY REST.

To the Editor of THE LANCET.

SIR,—I have read in the current number of your journal an able paper by Dr. Berkart on the importance of securing rest of the affected portion of lung in phthisis. As I have been working at this for several years, I ask to be allowed to say a few words on the subject.

Whoever reads Dr. Berkart's paper will see that it might have been written almost in its entirety years ago by anyone to whom the idea of resting the lung might have occurred. Almost the whole paper consists of theoretical considerations, very ably put, it is true, but still theoretical. The same line might have been taken by myself more than three years ago; but I preferred to put the matter to the test of actual observation. This is customary in other branches of science, and an experimenter or observer to whom a "happy thought" may have occurred is usually expected to make his experiments or observations on this a prominent feature of anything he may publish. Such is not the course which Dr. Berkart has adopted in his ingenious paper; but he has adopted another, which gives him an unfair advantage over more patient observers. The corrected proof of a paper of mine is in the hands of the printer of the *Dublin Monthly Journal*; and so anxious have I been to fully test the method that I take no account of any cases which have occurred since the beginning of the present year. Although, however, I have not formally published, I have exhibited the treatment over and over again to several members of the profession here, including my colleagues at the Belfast Dispensary. I also mentioned what I was doing to several members of the profession that I met at the Birmingham meeting of the British Medical Association. And at an early stage of my investigations I took the opportunity, in the course of a discussion on another subject at the Ulster Medical Society, to state the high opinion which I felt myself forming of the advantages of rest in some lung affections. This was all that I deemed justifiable without extended observations.

I think, then, that in putting theory to the test of practice, my claim to priority can hardly be disputed; for the sentence or so in which Dr. Berkart tells what he has actually done is so very vague as to give no ground whatever on which one could form an opinion as to either his method or his results. As to priority in suggesting the idea, if it be said that my not having published before anyone else in the *Journal* destroys my claim, the same remark will apply to Dr. Berkart; for, however long and however publicly he may have been giving expression to his line of thought in the presence of all comers to the institution with which he is connected, he also has been anticipated in the matter of full publication. At a meeting of the Medical and Chirurgical Society, November 12th, 1872, in a discussion on Dr. Ransome's paper on the "Respiratory Movements of Man," Drs. Anstie and Powell were reported in the journals as having made observations showing that they had a notion of the importance of restraining respiratory movement in phthisis and other chest affections.

In my paper above alluded to I have almost excluded theoretical considerations; and if this letter had been shorter I had intended, with your permission, to slightly supplement in this direction what Dr. Berkart has said. Perhaps you will allow me to direct attention to Laennec's view, that extensive pleuritic effusion prevented pneumonia; to the fact that, in a lung partly bound down by pleuritic adhesions, the free portions are more liable to phthisical processes than the confined portions; to the effect of pleuritic adhesions in the neighbourhood of cavities in promoting contraction and cicatrisation; to Copland's opinion that in some cases of pneumothorax the air by its pressure might promote the healing of the cavity; and to the evil effects of certain constrained positions of the body, which limit the motions of the lower masses of lung by pressing the abdominal viscera up towards the thoracic cavity.

Your obedient servant,
Belfast, October 18th, 1873. JOHN M'CREA, M.D.

Student.—The next preliminary examination will be held on the 9th, 10th, and 11th of December at the University of London, Burlington-gardens. For information on the other points we must refer our correspondent to our Students' Number published on the 13th ult.

Perplexed.—Yes.

E. R., (Eastbourne) had better apply to her usual medical attendant, as we do not give professional advice, and cannot forward private answers to our correspondents.

F. T.—Apply to the Secretary of the College.

Dr. G. E. Shuttleworth, (Lancaster.)—In *Stricker's Medizinische Jahrbücher*. We regret that we cannot, at least at present, furnish our correspondent with the exact references.

Mr. Coe, (Chorlton Hospital.)—We shall be glad to receive the paper.

A DESERVING OBJECT.

DR. JOHN ADAM BOLTON, of Leicester, whose life and labours we noticed in THE LANCET of the 20th ult., has left a son, whom his widow is anxious to get into Epsom College. Dr. Bolton was a Life Governor of the College, and always its energetic friend. We hope that this consideration will find practical appreciation in influential quarters.

Evolutionist, (Manchester.)—Professor Huxley has not yet replied to Dr. J. Hutchison Stirling's critique, entitled "As regards Protoplasm" (second edition, *Blackwood*).

GOOD.

OUR excellent friend *Punch* was extremely felicitous over the Taunton election. The cartoon represents Mr. Gladstone in an arm-chair, to whom Dr. *Punch loquitur*:—

"And how are we now, my dear friend?

"Mr. G.—O, so much better, Doctor. The 'Dover powder' did not agree with me at all; but 'James powder' has done me a world of good."

Pathos, (Liverpool.)—We agree with our correspondent as to the physiological fallacy of the prescription.

Justitia.—He is not justified in using the title of "Doctor."

Rev. W. East.—At the National Hospital for the Epileptic and Paralysed, Queen-square, Bloomsbury. Such epileptics as are considered by the physicians suitable for admission become in-patients as vacancies occur.

THE letter of *Dr. Rogers* shall appear next week.

COFFEE AS AN ABSORBENT.

To the Editor of THE LANCET.

SIR,—As the subject of "disinfectants" is now engaging the attention of the profession, will you kindly place the following account in your journal of the experience I have had of coffee.

In the year 1866 you gave insertion to a short account of mine on "Coffee as an Absorbent." That letter was the result of reading one in THE LANCET from Dr. Shortt in the same year on "Coffee as a Disinfectant." I can truly endorse all that Dr. Shortt says on the value of coffee for this purpose. I have constantly used it for destroying bad smells, as well as for dressings to ulcers and cancer, and I consider it superior to dry earth or any other dressing in these affections. The following case will show its value.

In August last I had charge of a gentleman's practice in Hertfordshire. A patient I had to attend to had been operated on by Mr. Paget, of Cambridge, for cancer of the breast; the smell was most offensive. I at once applied fresh-ground powdered coffee. On my next visit the room was perfectly sweet, to the great delight of the lady. In four days several patches of new skin had formed over the ulcerated surface; but she complained of its giving great pain, and it was discontinued. Her own expression was, "It seems to draw in and tighten everything too much." Had she continued to use the coffee, I feel sure the whole surface would have been covered over with new skin. Being in the dining-room below, I remarked there was a very dreadful odour, when she replied they were infested with rats, and had been using poison to kill them, and no doubt they had died under the floor or in the partitions. I said half a pound of fresh coffee will make the room as pure as any other in the house. The hint was acted on, and all smell destroyed in a few hours.

I feel satisfied the value of coffee is not sufficiently known either as a dressing for foul ulcers or as a disinfectant. Dr. Letheby says in his late lecture: "By disinfection I mean the removal, neutralisation, or destruction of that which was offensive to the senses or hurtful to the body"; and this destruction was effected in one of four ways. Now, whether coffee strengthens the affinities of organic substances and enables them to resist decay, or acts chemically and produces a new compound not susceptible of decay, or hurries on the changes of decomposition and oxidation and speedily arrives at the final stage of decay and rest, or as a special agent which has specific powers of disinfection, I cannot pretend to give an opinion; but trust that you, Sir, in your next accounts of these substances will give the profession the benefit of your extended experience.

I am, Sir, your obedient servant,
Holland-road, Kensington, Oct. 21st, 1873. WM. STOWY, F.R.C.S.

Mr. William S. Tuke, (Falmouth.) — Deschanel's work is preferable, and will more than suffice. Alleyne Nicholson's Zoology would suit our correspondent's purpose admirably.

Dr. Huntley Gordon.—Thanks. The story bears a very different construction when properly told.

Enquirer.—We suspect that the case would not come within the terms of any Act of Parliament.

X. Y. Z., (Great Yarmouth.)—Apply to the Director-General, 6, Whitehall-yard.

Mr. Thos. Phillips.—Bichromate and sulphuric acids, of each one part; water, twenty parts. All by weight.

A Country Surgeon will have no difficulty in witnessing the procedure on an operating day at many of our London Hospitals.

Speaker.—Any respectable ironmonger.

Therapeutist can procure the remedy of Messrs. Savory and Moore, New Bond-street.

Dr. S. R. P., (Exminster.)—The subject shall be gone into next week.

COLD TEA FOR THE TROOPS IN THE ASHANTEE EXPEDITION.

To the Editor of THE LANCET.

SIR,—I am informed that our troops in the Ashantee expedition are to be supplied with "cold tea"—a very refreshing and wholesome beverage. Indeed nothing could be better for them in a hot climate if properly made; but if tea be *boiled*, as it probably will be, the decoction will be far from pleasant and refreshing, and it will create a craving for stimulants. Cold tea should be made only a few hours before it is used.

Yours obediently,
October, 1873. SENEX.

Mr. Chas. Clements.—The certificate L.M. is given by the Dublin school; but it is not recognised in the Register of the General Medical Council, and its holder, therefore, cannot recover fees.

SEPARATION OF THE CORONAL SUTURE WITHOUT FRACTURE.

To the Editor of THE LANCET.

SIR,—While officiating as civil surgeon at Guga, Bengal, on the 12th August, 1873, I was requested to examine the body of a native, stated to have died from cholera.

Autopsy.—Body of a male, aged about fifty-five, well nourished; mark of severe depressed contusion extending from front of right ear to the vertex, broad and well marked; skin unbroken, save a slight puncture at back of head. The scalp was tough, and closely shaven, according to custom. On reflecting it there was found extravasation of blood in the line of bruise, also beneath the temporal muscle on left side. The frontal bone was merely attached to the two parietals by the periosteum, and became completely detached on handling it without using any traction, more especially on the right side. No fracture or even depression could be detected after careful examination, and all the other sutures were firm and immovable. There was profuse extravasation of blood on the surface of the brain beneath and between the membranes over the right hemisphere, and in a less degree all over the brain; deep congestion of substance of right hemisphere, especially at anterior part, also portions of brain-substance disorganised and softened; serous effusion in ventricles. Lungs congested, and adhesions of right pleura. Heart: right ventricle empty, tricuspid valves diseased; left ventricle contained a little blood. Liver and spleen enlarged and congested. Stomach contained some undigested rice. Intestines normal. The post-mortem appearances disclosed of course negatived the idea that death was due to cholera. It is a common practice with the natives of India to attribute deaths by violence to disease.

Remarks.—I have been unable to find any other instances of separation of the sutures of the bones of the skull without fracture from direct violence in the back numbers of THE LANCET for some years. Mr. Erichsen also states that it is very rare. The weapon usually employed by the natives, as in this case, is a lathee or stout bamboo, about four feet and a half in length, thicker at one end than the other.

Cases of suicide by taking opium are of very frequent occurrence, generally females; but detection is usually easy, as the solid drug is often found in the stomach, being swallowed in large quantities.

I am, Sir, your obedient servant,

R. A. K. HOLMES, B.A., M.D.,
Allahabad, Sept. 24th, 1873. 18th Bengal Cavalry.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. C. A. Gordon, London; Dr. A. Meadows, London; Dr. Dickson, Buxton; Dr. E. Bennett, Edinburgh; Mr. Lombard, Uxbridge; Mr. Gale, Manchester; Mr. Scott, London; Mr. Martin, Walkden; Mr. Holroyd, Canterbury; Mr. Veitch, Middlesborough; Dr. Evans, Dowlais; Messrs. Haack and Co., Berlin; Dr. Latham, Cambridge; Mr. Sweeney, Rochester; Mr. Grant, Clifton; Mr. Greener, Barking; Dr. O'Brien, Milford; Mr. A. J. Harvey, London; Dr. Griffiths, Dublin; Mr. Hawkins, London; Mr. Smith, Passage West; Mr. Hewetson, Leeds; Mr. Sympson, Lincoln; Dr. Geyder, Bradford; Mr. O'Flanagan, Houghton-le-Spring; Mr. Grove, Worksop; Mr. Percy, Preston; Mr. Hunt, Whitchurch; Mr. Wansfield, Chatham; Dr. Mackay, Rosedale Abbey; Mr. Parkinson, Manchester; Dr. Gale, Manchester; Dr. Lester, Ashton; Mr. Thornton, Ware; Mr. J. W. Curran, Mansfield; Mr. Mann, London; Dr. M'Crea, Belfast; Mr. R. Parkinson, Waltham; Dr. Gilman, Linlithgow; Mr. Shuttleworth, Lancaster; Mr. C. Goward, Hereford; Mr. Bredin, Charl Sutton; Mr. Bourne, Hitchin; Mr. Eddison, Leeds; Mr. Wilder, Dartford; Mr. Rincey, Eastbourne; Mr. Colbourn, Howden; Mr. Haddon, Wick; Dr. Burton, Ruabon; Mr. Henshaw, Melbourne; Dr. Harding, Whittlesea; Dr. Goaley, New York; Mr. Wright, London; Mr. Gorringe, Canterbury; Mr. White, Boston; Mr. Downing, Godalming; Mr. Clements, London; Mr. Sutton, Norwich; Mr. Chater; Mr. Osborne, York; Mr. Belfour, Hampstead; Mr. Walford, Colchester; Mr. Poole, London; Mr. Edwards, Thirsk; Mr. Doudney, Maidenhead; Dr. Kerr, Markyate Street; Mr. M'Gill, Littleborough; Mr. Edwards, Aberdeen; Dr. Southey, London; Mr. Harman, Brading; Mr. Barnes, Hammersmith; Mr. R. J. Walton, Leamington; Mr. Grant, Carnarvon; Mr. Sharman, Leeds; Mr. Evans, Lichfield; Messrs. Fradelle and Co., London; Mr. H. Welton, Ipswich; Mr. Holford, London; Mr. Johnston, West Bromwich; Dr. M'Kay, Truro, Nova Scotia; Dr. Heiliglathal, Baden; Mr. Blower, Bedford; Mr. Boyce, Grimsby; Mr. J. Buck, Rugby; Mr. Graham, Taunton; Mr. Berry, Holywell; Mr. Dougall, Edinburgh; Dr. Allen, London; Mr. Austie, Devizes; Mr. Lush, Andover; Mr. Story, Kensington; Mr. Catheart, Norwich; Mr. M'Caskie, Anston; Mr. Lewis, Hornsea; Dr. Gibbon, London; Mr. W. Lang, Ramsgate; Mr. R. Forney, Douglas; Mr. Thornton, Foot's Cray; Mr. Corry, Dunfermline; Mr. Lowe, Liverpool; Dr. More, Rothwell; Dr. Hawkes, Alton; Mr. J. Mitchell, Stirling; Mr. Field, Chatham; Mr. Crocker, Nottingham; Mr. Crawford, Chippenham; Mr. Layton, Derby; Mr. Cover, Daventry; Mr. Minnard, Rotherham; Mr. Walton, Dublin; Mr. Porter, Dalston; Mr. Goodman, Tavistock; Mr. Hind, Bedford; Dr. Holmes, Allahabad; Mr. H. Grayson, York; Dr. Buck, Brading; Mr. R. Murch, Maidenhead; Mr. E. Bennett, Worksop; Mr. Henry, South Shields; Dr. M'Leod, Calcutta; Mr. Fussell, Brighton; Mr. W. Johnson Smith; Mr. Cramer, Edmonton; Perplexed; Justitia; W. A. C.; Beta; Rusticus; F. T.; W. G.; Beta; Delta; Pathos; A Well-wisher to North Staffordshire; Speaker; Enquirer; Deltoid; The Secretary of the Royal College of Surgeons of Edinburgh; Senex; A Country Surgeon; Therapeutist; Union Medical Officer; &c. &c.

Lowestoft Mercury, Cheltenham Free Press, West Country Lantern, Lancaster Gazette, Barrow Times, Essex Weekly News, Norwich Mercury, Public Health, Yorkshire Post, Camberwell and Peckham Times, Middlesex Chronicle, Lincoln Mercury, and *Greenwich Chronicle* have been received.

Medical Diary of the Week.

Monday, Oct. 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations on the Eye, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON (11, Chandos-street, W.)—8 P.M. Clinical Night.—Mr. Churton, of Erith, "On a Case of Suppurative Pericarditis, &c.," with Specimen.—Mr. A. E. Durham, "On a Case of Foreign Body in the Pleura, accidentally introduced through Opening made for Empyema, and successfully Removed."—Dr. Routh, "On a Case of Stone impacted in Kidney," with Specimen.—Dr. Purcell: A Specimen of Calculus in the Pelvis of Kidney.

Tuesday, Oct. 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Dr. Miller Ord, "On a Case of Duchenne's Pseudo-Hypertrophic Muscular Paralysis." Dr. C. J. B. Williams (President), "On the Acoustic Principles and Construction of Stethoscopes and Ear-Trumpets."

Wednesday, Oct. 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Oct. 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Oct. 31.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Nov. 1.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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